Proceedings

All Together Better Health VII
International Interprofessional Conference
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Co-Hosted by the University of Pittsburgh and the National Center for Interprofessional Practice and Education
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Executive Summary

The All Together Better Health VII conference was held in Pittsburgh, Pennsylvania, in the United States at the University of Pittsburgh campus from June 6-8, 2014. The conference involved 895 attendees, including keynote speakers, committee members, one-day registrants, scholarship-sponsored students, and University of Pittsburgh volunteers. The conference was co-hosted by the University of Pittsburgh and the National Center for Interprofessional Practice and Education. The All Together Better Health conference series is the leading international conference on interprofessional practice and education. The conference series is held biennially and the locations are as follows:

- ATBH IX 2018 in Auckland, New Zealand
- ATBH VIII 2016 in Oxford, England
- ATBH VII 2014 in Pittsburgh, PA
- ATBH VI 2012 in Kobe, Japan
- ATBH V 2010 in Sydney Australia
- ATBH IV 2008 in Stockholm, Sweden
- ATBH III 2006 in London, England
- ATBH II 2004 in Vancouver, Canada
- ATBH I 1997 in London, England

The conference was organized by a local planning committee at the University of Pittsburgh and advised by an eight-person Global Conference Committee, representing major global regions. Planning for this conference occurred after the dissolution of InterEd, the International Association for Interprofessional Education and Collaborative Practice, and during the formation of World Interprofessional Education and Collaborative Practice Coordinating Committee (WCC). The WCC will oversee the promotion and conduct of future ATBH conferences.

Conference Objectives

The ATBH VII conference objectives were to:

- Cultivate a global vision for collaborative practice in health care,
- Discuss new models of interprofessional care,
- Promote and disseminate research in the field,
- Explore educational strategies to prepare a “collaboration ready” workforce, and
- Inform national and international policy.

Conference Themes

ATBH VII built on the themes of previous ATBH conferences. Reflecting the contemporary focus on improving health care and population health while lowering costs, the conference was organized around the following themes within the context of interprofessional practice and education:

- New models of interprofessional practice and team-based care;
- Aligning reimbursement with interprofessional care delivery and the economics;
- Educating teams and integrating advanced practice providers in the clinical practice environment;
- Educational redesign to prepare a "collaboration ready" healthcare workforce;
- Legal and policy environment;
- Technology applications (e.g., electronic health records, telehealth, e-health, social media, etc.); and
- Theories, models, measurement and evaluation.
Conference Details

Global Conference Committee

The Global Conference Committee convened one year prior to ATBH VII and had bi-monthly calls leading up to the conference to discuss conference planning and content. The committee was especially critical for the development of conference themes, marketing and sponsorship planning, identifying and securing keynote speakers, soliciting global reviewers and conference participation, and reflecting on student programming.

- Everette James, JD, MBA, University of Pittsburgh
- Susan Meyer, PhD, American Interprofessional Health Collaborative (AIHC)
- Lesley Bainbridge, BSR, Med, PhD, Canadian Interprofessional Health Collaborative (CIHC)
- Margo Brewer, Australasian Interprofessional Practice and Education Network (AIPPEN)
- John Gilbert, PhD, FCAHS, Canadian Interprofessional Health Collaborative (CIHC)
- Richard Gray, EdD, MA, Centre for the Advancement of Interprofessional Education (CAIPE)
- Flemming Jacobsen, PT, MPH, PhD, Nordic Interprofessional Network (NIPNET)
- André Vyt, PhD, European Interprofessional Practice and Education Network (EIPEN)

Abstract Submission and Review Process

Over 650 abstract submissions from authors in 27 countries were received across all seven of the conference themes. Over 120 reviewer volunteers served on the Abstract Review Committee, which selected 563 presentations in February 2014 for presentation at the conference:

- Full Session Workshop 19
- Full Session Panel 15
- Full Session Roundtable 2
- Oral Presentation 147
- Poster Presentation 341
- Student Poster Presentation 39

Sponsorship

General sponsors:
- University of Pittsburgh Health Policy Institute
- National Center for Interprofessional Practice and Education
- UPMC
- Elsevier Clinical Solutions

Foundations and associations:
- Josiah Macy Jr. Foundation
- Stern Family Foundation
- American College of Clinical Pharmacy
- Accreditation Council for Graduate Medical Education
- American Association of Colleges of Pharmacy
- American Dental Education Association
- American Physical Therapy Association
- Council on Social Work Education

Academic institution sponsors:
- Arizona State University, College of Nursing & Health Innovation
Registration and Attendees

ATBH VII had the highest attendance of the ATBH series to date with 895 registered attendees. The attendees by registration type were as follows:

- Regular 606
- Student 166
- One day 95
- Volunteer 28

Attendees came to the conference from 18 different countries, representing all of the WHO regions:

- Australia 15
- Belgium 1
- Canada 127
- Denmark 14
- Finland 2
- Indonesia 9
- Ireland 1
- Japan 32
- Malaysia 1
- New Zealand 6
- Norway 4
- Qatar 3
- South Africa 3
- Spain 1
- Sweden 15
- United Arab Emirates 1
- United Kingdom 42
- United States 590

The attendees also represented a wide variety of professional backgrounds. Attendees self-identified their background and had the option of selecting more than one:

- Researcher 196
- Practitioner 123
- Administrator 157
- Policymaker 14

Full Sessions and Oral Presentations

1A. Exploring National Contexts for Interprofessional Education and Practice: An International Comparison of Forces and Factors

Program abstract: National contexts provide unique settings for interprofessional education and practice, reflecting different cultural, social, and political forces and factors. This panel is designed to address the need for international comparisons to clarify different barriers to, and facilitators of, interprofessional efforts. Comparisons are made among England, Norway, Canada, and the US.

- Phillip Clark, University of Rhode Island, Kingston, RI, USA
- Gerd Bjorke, Stord/Haugesund University College, Stord and Haugesund, Norway
- Shelley Doucet, University of New Brunswick, Saint John, NB, Canada
- Sarah Hean, Bournemouth University, Bournemouth, England, UK

Submitted abstract:

Background: The World Health Organization (2010) Framework for Action on Interprofessional Education and Collaborative Practice highlights the growing importance of health and social care students and professionals learning how to work together. However, differing national contexts present very different settings for the development and implementation of new models and methods of
interprofessional education (IPE) and practice (IPP), and these various environments can provide both substantial supports and significant deterrents to their successful development and continuation.

**Objectives and Implications:** The overall goal of this session is to engage both panelists and participants in constructing an analytical framework that systematically categorizes the significant forces and factors shaping IPE and IPP at the national level. The development of a typology of these elements can facilitate the construction of a systems model to identify significant elements of national context, explore their interrelationships, and project their impacts on the development, implementation, and continuation of IPE and IPP models and programs around the world.

**Methods:** This panel session will present the experience of four countries (England, Norway, Canada, and the US) with regard to factors and forces that shape contexts for both IPE and IPP. Each panelist representing a different country will be asked to respond to a standard set of questions:

1. What are the forces in your health and social care system nationally that either support or threaten IPP in clinical settings?
2. How do national developments and requirements in higher education (e.g., accreditation, licensure, and certification) impact the development of IPE in academic settings?
3. Who are the major players or stakeholders in your national system that are the most invested in bringing about greater IPE and IPP? What are the outcomes they hope to achieve?
4. What lessons can your national context teach others about the development and continuation of IPE and IPP efforts?

Each panelist will have 12 minutes to present their interpretation of these forces in their national setting, and then we will open the discussion among panelists and participants. They will be invited to share their perceptions and interpretations of the factors in their own country’s context. We expect to provide sufficient time for a lively dialogue on what aspects of each setting are the most important in shaping the future of IPE and IPP. We will develop a brief written survey to capture additional information, comments, and observations from each participant to be collected at the end of the program. The results will be used to generate an ongoing examination of these issues beyond this meeting.

**Results:** Following the panel discussion, participants will have:

1. An understanding of how broader health and social care forces inform and shape the national context for IPE and IPP.
2. A framework for developing methods and strategies to promote IPE and IPP based on supporting factors and forces within their own country.

**Author Biographies**

Phillip Clark, ScD is Professor and Director of the Program in Gerontology at the University of Rhode Island. He received his Doctorate in Public Health from Harvard University, and has been Visiting Professor at the Universities of Guelph and Toronto in Canada, Fulbright Scholar at Buskerud University College in Norway, and Visiting Professor at Huddersfield and Bournemouth Universities in England. His experience includes teaching teamwork and developing and evaluating interdisciplinary research and demonstration projects.

Gerd Bjørke is Professor at Stord/Haugesund University College, Norway, working with qualification programmes for teachers as well as the development of IPE and an e-based project to strengthen students’ preparations for IPP. Her professional background is in physiotherapy, augmented with studies.
in sociology and education. She conducted a national research and development project on IPE within health education in Norway, with a final report produced in 2012.

Shelley Doucet, PhD is Assistant Professor in Nursing, University of New Brunswick (UNB); Adjunct Professor, Dalhousie Medicine New Brunswick; Affiliate Professor, University of British Columbia; and the nominated Research Chair in Interprofessional Patient-Centred Care at UNB. Dr. Doucet’s experiences teaching interprofessional student teams in classroom and clinical settings, as well as ongoing clinical experiences in mental health nursing, have led her to establish interprofessional health education and practice initiatives and explore their outcomes.

Sarah Hean, PhD is Associate Professor in the Health and Wellbeing Community at Bournemouth University. She has expertise in interprofessional education and collaborative practice (IPECP), with a particular interest in theory development. An educational researcher by background, she is Chair of In-2-Theory: International Interprofessional Scholarship and Practice Network, board member of the Centre of the Advancement of Interprofessional Education (CAIPE), and Associate Editor of the Journal of Interprofessional Care.

1B. A practical approach to transform our students/professionals into real collaborative professionals

Workshop

Program abstract: It is generally accepted that collaboration is an essential part of health care, especially in hyper-specialized environments. The objectives of this workshop are to apply business conflict resolution techniques into teaching collaborative practice, focusing on emotions management, and to understand that interprofessional teamwork is as much about people management as about structure building.

- Juan-Jose Beunza, Universidad Europea-Madrid (Laureate International Universities), Madrid, Spain
- Hugh Barr, Westminster University, London, UK

Submitted abstract: Background: It is generally accepted that collaboration is an essential part of health care, especially in hyper-specialized environments. However, it is questionable whether we really have an efficient program to train our students/professionals on it. Very often, we just send trainees into the field, hoping they will somehow learn the competence and skills from professionals. However, qualitative research shows again and again that professionals do not have a clear concept and do not practice a clear model of collaboration in their interprofessional work.

Objectives: To apply business conflict resolution techniques into teaching collaborative practice, focusing on emotions management. To understand that interprofessional teamwork is as much about people management as about structure building. Specific objectives are:

1. To understand the importance and role of emotions in collaborative practice, and to identify those emotions (self and others’) in specific scenarios.
2. To understand how emotions are generated by interests, and to analyze together how emotions change as interests are cared of (developing trust), or attacked (developing fear), consciously or unconsciously. We will review the five basic core interests proposed by the Program on Negotiation (PON, Harvard University): find value in what others think, say, feel or do; turning an enemy into a colleague; respect autonomy; acknowledge status and choose a fulfilling role.
3. To learn how to transform a frontal confrontation based on positions (win-loose schemes), into an interest based negotiation (win-win).

4. To learn how to develop adaptation skills to navigate successfully into a changing and sometimes unstable working environment (economical crisis) and to see negotiable opportunities where others only see confrontational threats (fear to change): “efficiency without quality is unthinkable, quality without efficiency is unsustainable” (NHS Highland 2010).

**Methods:** We will implement three learning tools: interactive case discussion based in real stories and/or brief edited segments of movies or TV series; theory principles applied to the previous cases and based on business negotiation techniques; role playing and debriefing.

**Results:** We expect the audience to personally experience the potential power of this program to transform them into experts in diagnosing the components of collaboration in a given scenario, and hopefully and with a bit of practice, to improve their collaborative practice in their own field. In other words, we expect to give the attendants the opportunity to move from unconscious incompetence into conscious incompetence, and perhaps, to conscious competence, in their interprofessional emotions management.

**Implications:** We hope to greatly expand the international network of people working on or interested at collaborative practice effective programs, both for health students and professionals.

**Author Biographies**
Juan-José BEUNZA is a Medical Doctor specialized in Internal and Tropical Medicine, with further training in Epidemiology and Statistics (SM1 Harvard; PhD Navarra, Spain). He worked 5 years in Uganda (Mulago Hospital & Makerere University). He is currently the Director of the Interprofessional and Collaborative Practice Program at the School of Medicine, Universidad Europea (Madrid, Spain). In addition, he offers teamwork management and training to businessmen and CEOs through his own training company.
Hugh BARR is President of CAIPE (Centre for the Advancement of Interprofessional Education, UK), Convener of the World Interprofessional Education and Collaborative Practice Coordinating Committee, Series editor for Radcliffe Press, Emeritus Editor of the Journal of Interprofessional Care, Honorary Fellow and Emeritus Professor of Westminster University and visiting Professor at Curtin University (Western Australia), University of Greenwich, Kingston University with St. George’s University of London, and University Campus Suffolk.

**1C. Incorporating Interprofessional Education from Academia to Practice**

**Workshop**

**Program abstract:** Incorporating Interprofessional Education (IPE) in academia and translating it to practice are challenges. We will introduce the Geriatrics Champions Program, a novel program providing lessons on the effective use of TBL in IPE. Teaching the benefits of team cohesion using the individual and team Readiness Assessment Tests will be emphasized.

- **Shelley Bhattacharya,** University of Kansas Medical Center, Kansas City, KS, USA
- **Stephen Jernigan,** University of Kansas Medical Center, Kansas City, KS, USA
- **Diane Ebbert,** University of Kansas Medical Center, Kansas City, KS, USA
- **Myra Hyatt,** University of Kansas Medical Center, Landon Center on Aging, Kansas City, KS, USA
- **Toby Turner,** University of Kansas Medical Center, Landon Center on Aging, Kansas City, KS, USA
- **Cara Busenhart,** University of Kansas Medical Center, Kansas City, KS, USA
Submitted abstract:

**Background:** Incorporating Interprofessional Education (IPE) in an academic medical center and translating it to clinical practice are challenging endeavors. Team Based Learning (TBL) is a novel strategy used with IPE to effectively achieve competency related to clinical practice areas and develop a collaboration-ready work force. Through the Geriatrics Champions Program (GCP) at the University of Kansas Medical Center (KUMC), students from six different professions have come together through TBL and other robust educational strategies to prepare students for the interprofessional care of older adults.

**Objectives:** Session participants will be able to:
1. Describe Team Based Learning and how it can be used for effective interprofessional education.
2. Discuss a collaborative experience of Team Based Learning.
3. Demonstrate improved scores on Readiness Assessment Tests when completed by a team.
4. Identify strategies, through effective group communication, for overcoming factors that limit the success of IPE and its translation to clinical practice.

**Methods:** We plan to briefly introduce the Geriatrics Champions Program, currently in its 3rd year, which has provided many lessons on the effective use of TBL in IPE. Core TBL concepts focusing on teaching the benefits of team cohesion, such as the individual Readiness Assessment Test (iRAT) and the team Readiness Assessment Test (tRAT) will be emphasized. GCP results will be shared. Prior to attending the session, two preparatory articles will be made available to participants. The GCP introduction will be followed by an interactive TBL experience focused on the use of iRATs and tRATs related to the preparatory work, in order to highlight how TBL can be effectively used for IPE. Each team will subsequently work cohesively to evaluate one of four predetermined factors that limit IPE success. TeamSTEPPS® communication strategies will be employed to facilitate discussion around translating IPE to clinical practice.

**Results:** During this session, we intend to engage a team of health professionals committed to interprofessional patient-centered care, in a TBL activity as a strategy to incorporate IPE in their respective academic or clinical settings. We also hope to address established IPE barriers when translating IPE lessons from the classroom to the practice setting using TeamSTEPPS® strategies.

**Implications:** Our workshop is designed with the implication of establishing improved health systems through communication between health profession education and interprofessional collaborative practice. This requires a collaboration-ready professional work force that will respond to local health needs, together with local health systems and policy leaders, to provide cost-effective coordinated patient care.

**Author Biographies**

Shelley Bhattacharya, DO, MPH, is an Associate Professor in the Division of Geriatrics within the Department of Family Medicine at the University of Kansas Medical Center. She is a geriatrician and has a passion for interprofessional education and practice. She is the lead faculty for the interprofessional Geriatric Interprofessional Teaching Clinic and is the recipient of a five year HRSA award for the “Geriatrics Champions Program”, teaching geriatrics to 146 learners in six professions.

Stephen Jernigan, PT, PhD is a Clinical Assistant Professor in the Department of Physical Therapy and Rehabilitation Science at the University of Kansas Medical Center. He serves on the Core Planning Team,
and the Curriculum and Faculty Development Committees of KUMC’s Center for Interprofessional Education and Simulation. He is also the Physical Therapy Faculty Mentor for KUMC’s Interprofessional Teaching Clinics and the Allied Health Professions coordinator for a HRSA-funded interprofessional collaborative practice grant in pediatrics.

Diane Ebbert, PhD, FNP-BC, is an Assistant Professor in the Schools of Nursing and Medicine at the University of Kansas Medical Center. She is the Director of Advanced Practice Nursing in the School of Nursing, and practices as a Family Nurse Practitioner in the Department of Family Medicine. She is a member of the core planning team for the Geriatrics Champions Program. She directs a safety net clinic which provides interprofessional education experiences for students from the School of Nursing, Health Professions and Medicine.

Toby Turner, DHA, APRN, BC, FAAN, is Associate Director and Nurse Practitioner, Geriatric Education Center, Landon Center on Aging, University of Kansas Medical Center. She also is a board certified geriatric nurse practitioner in a private collaborative practice across care settings including hospital, extended care, house calls, and hospice.

Kristy Johnston is the leader of the Center for Interprofessional Education and Simulation at KUMC. She has spent the majority of her adult career as a Learning Leader. She has a broad background in psychology and education with specific training and expertise in building new educational programs and providing the strategic direction for our new interprofessional program. Prior to KUMC Kristy ran a start-up distance learning company for Children’s Hospitals.

Cara Busenhart, MSN, CNM, APRN, is Program Director of Nurse-Midwifery Education at the University of Kansas School of Nursing. Ms. Busenhart has research interest in interprofessional education competencies, curricular design for adult learners, and use of simulation for interprofessional education. She is a faculty facilitator for the Geriatrics Champions Program and faculty provider/supervisor at an interprofessional Family Medicine/Midwifery teaching clinic, Maternal Options that Matter, in Kansas City, KS.

1D. Implementing Interprofessional Education in an acute care unit: Integration of theory into practice

Panel Presentation

Program abstract: In September 2013 an Interprofessional Education (IPE) Unit opened on an acute Medicine Unit in St. Catharines, Ontario, Canada. The purpose of this unit is to provide a forum where health care students can learn about interprofessional practice while simultaneously learning about discipline-specific standards of practice. Through small group discussion and case scenarios, participants will discuss the facilitators and barriers to the development and implementation of an IPE unit in an acute care hospital.

- Dawn Prentice, Brock University, St. Catharines, ON, Canada
- Allison Brown, McMaster University, Niagara Regional Campus, St. Catharines, ON, Canada
- Debi Francis, Niagara College, Welland, ON, Canada
- Bonny Jung, McMaster University, Hamilton, ON, Canada
- Karl Stobbe, McMaster University, Niagara Regional Campus, St. Catharines, ON, Canada

Submitted abstract:
In September 2013 an Interprofessional Education (IPE) Unit opened on an acute Medicine and Nephrology Unit at the St. Catharine’s General Hospital site in St. Catharines, Ontario. The launch of this unit is the culmination of several years of interorganizational planning between the regional hospital system and three educational partners. The purpose of the IPE unit is to provide a forum where health care students can learn about interprofessional practice while simultaneously learning about discipline-specific standards of practice and providing patient-centered care. Health care students from nursing, medicine, physiotherapy, occupational therapy and rehabilitation assistants are represented on this unit.

An interprofessional curriculum was implemented to assist with the unit clinical learning and activities such as bullet rounds, interprofessional rounds, student-led case presentations and discipline specific role presentations. Student evaluation methods include a Team Observed Structured Encounter (TOSCE) which assesses interprofessional competencies, IPE encounter cards as well as mid-term and final placement evaluations on the IPE unit itself. Evaluation of the IPE staffs’ attitude and perceptions of the IPE unit is also being investigated.

The objectives of this panel presentation are to:

1) Discuss the facilitators and barriers to the development and implementation of an IPE unit in an acute care hospital
2) Examine the impact of the IPE unit on health care students using the data from the IPE unit evaluation measures.

Small group discussion and case scenarios will be utilized in this interactive session which is directed at both educators and health care practitioners.
1E-1. Transforming Medical Education: Training Leaders and Teams for Reform through Systems Thinking

Oral Presentation

- Karen Wolk Feinstein, Jewish Healthcare Foundation, Pittsburgh, PA, USA
- Joanne Conroy, Association of American Medical Colleges, Washington, DC USA

Submitted abstract:
Notwithstanding the many acclaimed studies, including the IOM’s Crossing the Quality Chasm and To Err is Human, and the commitment of many quality improvement organizations, including the Pittsburgh Regional Health initiative (PRHI), the quality outcomes needle hasn’t moved much in this country. Even where new quality improvement methods are being used, they are vastly underused, thinly applied, and focused on “spot removal”– lone units addressing limited problems. Our healthcare system continues to be the most costly in the world and performs poorly relative to most advanced economies on important population health measures.

Essential to the national conversation on reform is the discussion of the need for redesigning medical education to align with the new changes. Patient safety, quality improvement, systems thinking, and work redesign must be universal principles of the new healthcare system. This will require that physicians and other healthcare workers be able to incorporate important new skills into their daily practice: continuous quality improvement, prevention and analysis of medical errors, seamless care transitions, teamwork, evidence-based outcomes, and performance measures related to value and cost.

The fact is that we are not preparing our health professionals to lead or practice in high performing organizations. Undergraduate business majors get basic instruction in safety science, organizational behavior, systems theory, and economics. They are exposed to management techniques that guarantee reliably high performance. But in healthcare education, particularly medical education, these subjects are optional or mostly nonexistent. Even healthcare professionals who know that the system can be improved don’t have the skills to correct the course. Knowing what care to deliver is only part of medicine; knowing how to deliver it and with whom, is also central.

The medical education enterprise is just beginning to venture beyond its traditional emphasis on conveying diagnosis and treatment skills, to meaningfully integrating these new elements into clinical curricula. A select number of undergraduate programs, medical schools, and residency programs have begun to emphasize the importance of quality improvement methods and interdisciplinary teamwork. The good news is that more accreditation bodies, curriculum developers, educators, and policy makers are beginning to call for education reform in the health professions. These are stirrings on which to build.

An August 2013 national gathering, funded by the Jewish Healthcare Foundation and co-convened by the Association of American Medical Colleges and PRHI, brought together experts from academic medicine, healthcare systems, and public policy to discuss how best to design and implement new curriculum and training that builds towards the important goals of safe, efficient and high quality healthcare delivered by interdisciplinary teams of professionals. Since that time, a national workgroup has been advancing concepts of curriculum redesign and systems based practice and thinking.
This proposed session will feature a panel of those experts and describe and seek input on the current directions and strategies that are being considered to drive the much needed significant overhaul of our country’s academic medical system.

**Author Biographies**
Karen Wolk Feinstein, PhD is president and CEO of the Jewish Healthcare Foundation and its supporting organizations, the Pittsburgh Regional Health Initiative and Health Careers Futures. Appointed in 1991, she has made JHF a leading voice in patient safety, healthcare quality and workforce issues. PRHI was the nation’s first regional collaborative devoted to making all healthcare institutions safer, more efficient and more diligent in applying best practices through the use of quality engineering principles. She founded HCF to assist the healthcare industry in attracting and retaining employees. Dr. Feinstein earned her bachelor’s degree at Brown University, her Master’s at Boston College and her PhD at Brandeis University.

As chief health care officer, Joanne M. Conroy, M.D., focuses on the interface between the health care delivery system and academic medicine, paying particular attention to how health care in academic settings can address quality-of-care and patient-centered care issues. Dr. Conroy represents the interests of approximately 400 major teaching hospitals and health systems, including 64 Veterans Affairs medical centers, through the AAMC Council of Teaching Hospitals and Health Systems, in addition to overseeing the Group on Faculty Practice, Group on Resident Affairs, Chief Medical Officers Group, and the Compliance Officers Forum. Dr. Conroy earned her B.A. degree in chemistry from Dartmouth College, and was awarded her M.D. degree from the Medical University of South Carolina.

James Philip Bagian, MD, PE is an engineer and former NASA astronaut. After leaving NASA in 1995, Bagian was elected as a member of both the National Academy of Engineering and of the Institute of Medicine. Bagian was the Veterans Health Administration (VHA) Chief Patient Safety Officer, and Director of the VA National Center for Patient Safety. Bagian is currently the Director of the Center for Health Engineering in the Department of Anesthesia at the University of Michigan.

**1E:2. Graduate interprofessional leadership development to facilitate collaboration, safety, and quality in an integrated healthcare system**

**Oral Presentation**

- **Andrea L. Pfeifle**, University of Kentucky, Lexington, KY, USA
- **Melanie Hardin-Pierce**, University of Kentucky, Lexington, KY, USA
- **Susan McDowell**, University of Kentucky, Lexington, KY, USA
- **James Ballard**, University of Kentucky, Lexington, KY, USA

Submitted abstract:
**Background:** The development of collaborative practice ready health workforce is required for optimal health service delivery (World Health Organization, 1010). But in order to address the gap between education and practice that limits our graduates’ readiness to work together we must provide practice-based and mentored opportunities for residents and other advanced practice learners to develop context-specific transformational leadership skills.

**Objectives:** Presenters will describe core components and outcomes of a competency-based interprofessional leadership development curriculum pilot designed to teach and provide mentored opportunities for graduate and post graduate nurses, resident physicians and pharmacists to lead
collaborative health care delivery and quality improvement teams. Attendees will use evaluation data to consider program effectiveness and discuss its generalizability to other settings.

**Methods:** An interprofessional leadership development curriculum based on the Core Competencies for Interprofessional Collaborative Practice (IPEC Expert Panel, 2011) was designed and piloted with nurse practitioner, medical resident, and pharmacy resident learners. Participants completed selected readings and inventories, attended seminars and workshops (i.e., collaborative care models, personal and team leadership styles, emotional intelligence, effective interprofessional communication, conflict resolution), worked in teams to identify, develop, implement and evaluate a rapid cycle quality improvement project in the academic health center, and presented their results to enterprise healthcare leadership and faculty.

**Evaluation:** Formative and summative evaluation results will include a summary of learning outcomes demonstrated by team quality and safety projects, themes generated during semi-structured interviews with participants and preceptors, and participants’ self-reported pre/post change in knowledge, learning, and practice using a modified Nurse-Physician Collaboration Scale (Ushiro, 2009).

**Implications:** Few, if any similar longitudinal curricular models exist for advanced practice learners to develop the knowledge, skills, and attitudes needed to lead interprofessional teams. This presentation will provide the basis for continued discussion and growth in this area.

**Author Biographies**
Andrea L. Pfeifle, EdD, PT is Director of the Center for Interprofessional HealthCare Education, Research and Practice at the University of Kentucky, which promotes teamwork and excellence in patient and community centered care through interprofessional education, research, and practice. Dr. Pfeifle graduated from the University of Kentucky with a BHS in Physical Therapy, a Master of Science in Instructional Systems Design and a Doctor of Education in Curriculum and Instruction.

Susan McDowell, MD earned her medical degree from the Medical College of Georgia. She is board certified in Physical Medicine & Rehabilitation with a subspecialty certificate in Spinal Cord Injury Medicine. She has served in numerous leadership roles within the department and the College of Medicine. Currently she is the Associate Dean for Graduate Medical Education and ACGME Designated Institutional Official for the University of Kentucky.

Melanie G. Hardin-Pierce DNP, RN, APRN, ACNP-BC is an associate professor in the University Of Kentucky College of Nursing, where she teaches in the Doctor of Nursing Practice program and coordinates the Acute Care Nurse Practitioner Track. She is a board certified adult-gerontology acute care nurse practitioner and practices as a critical care intensivist. She is active in research and evidenced-based practice of critically ill adults and is involved in innovative inter-professional education and collaboration.
1E-3. Building better interprofessional (IP) teams: Team Performance Scale (TPS) may help identify at risk IP student teams

*Oral Presentation*

- **Marilyn Hanson**, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- **Reena Antony**, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- **Tamzin Batteson**, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

**Submitted abstract:**

All first year, on-campus health professions students at Rosalind Franklin University of Medicine and Science participate in a sixteen week Interprofessional First Year Experience course. The purpose of the course is to teach students to work collaboratively in interprofessional teams. A major requirement of the course is for each interprofessional student team of 14 or 15 students to complete a community-based, prevention education service learning project.

A two year review of end-of-course surveys indicate that some interprofessional student groups never progress to where they feel they function effectively as a team. The Team Performance Scale (TPS) has been adopted to identify these ‘at risk’ teams for the purpose of applying intervention methods.

The teams plan the service learning project during the second and fourth weeks of the course. After week four students complete the seven point (0 – 6) TPS. Individual and Team TPS mean scores and standard deviation are calculated. Teams and individuals that fall below one standard deviation under the mean team score are identified as ‘at-risk’. Team Facilitators complete the TPS. Their score is correlated to the student team score. Individual students and teams identified as ‘at-risk’ are sent a follow-up questionnaire to determine the root cause of their perception of poor team performance. The results of these questionnaires will be used to understand ‘at-risk’ teams and individuals and develop intervention measures team facilitators can use for improving team performance.

Post service learning project TPS results will be analyzed to determine if team function naturally improves with time. In addition to the TPS, all students also complete a service learning reflection that includes qualitative questions to report their personal view of their team’s performance.

Pre and Post service learning project Team Performance Scale results, root cause analysis as well as identified intervention methods will be presented.

1E-4. Creating Leaders to Advance IPL and IPP in Australia and Canada – Two Countries One Vision

*Oral Presentation*

- **Margo Brewer**, Curtin University, Faculty of Health Sciences, Perth, Western Australia, Australia
- **Ivy Ondasan**, University of Toronto, Faculty of Medicine, Toronto, ON, Canada
- **Lynne Sinclair**, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada
- **Franziska Trede**, Charles Sturt University, Education For Practice Institute, Sydney, NSW, Australia

**Submitted abstract:**

**Background:** To create sustainable environments for interprofessional education and practice there is a need to facilitate staff to become effective leaders of change. This presentation will report on a
collaborative partnership to adapt a successful Canadian program to two Australian contexts to develop health service capacity to lead interprofessionally.

**Objectives:** This presentation will:

1. Identify elements of successful change leadership programs;
2. Explore collaborative partnerships for faculty/staff development programs;
3. Share key successes linking interprofessional education and practice.

**Methods:** A mixed methods approach was adopted to evaluate the impact of the three pilots conducted in Australia; the first two delivered to health service staff in an urban setting in Perth, Western Australia (Curtin University), and the second in rural New South Wales (Charles Sturt University). These pilots, funded by Health Workforce Australia and the Office of Learning and Teaching, Australia addressed the following research questions:

1. What outcomes did the interprofessional change leadership program generate?
2. How did various aspects of the interprofessional change leadership program contribute to these outcomes?
3. How did individual participants vary in terms of their interprofessional change leadership program outcomes and why?

**Results:** To date the first pilot has been delivered in Perth with initial findings indicating that participants not only have increased knowledge and understanding of interprofessional practice and education but several have led new interprofessional initiatives within their clinical setting. This presentation will provide data from workshops conducted in October and November 2013.

**Implications:** Significant investment in faculty development/staff training is required if interprofessional education and practice are to become embedded within health education and service. The adaptation of the University of Toronto’s best practice model in change leadership can ensure both a successful outcome and efficient use of staff (both trainers and trainees) resources.

**Author Biographies**

Ivy Oandasan’s main focus of research has been in health professions education specifically IPE and family medicine education. She was the project lead for the Literature Review and Environmental Scan for Health Canada’s Interprofessional Education for Collaborative Patient Centered Practice Initiative in 2004 and a literature review on Effective Teamwork for the Canadian Health Sciences Research Foundation in 2005. Both projects created seminal documents used nationally and internationally to advance interprofessional education and care.

Lynne Sinclair is an Educational Consultant and also the Innovative Program and External Development Lead at the Centre for Interprofessional Education, University of Toronto (U of T). She is an Assistant Professor and served as the Associate Chair of the Department of Physical Therapy, Faculty of Medicine at U of T. Lynne is widely invited as a keynote speaker and she has taught all over Canada, the USA, Australia and Saudi Arabia.

Margo Brewer is the Director of Interprofessional Practice in the Faculty of Health Sciences, Curtin University, Australia. She is a speech pathologist, life coach and has accrued a wide range of experience as a clinician, clinical educator, academic and project manager. She was the Clinical Coordinator for the speech pathology program at Curtin for 8 years, and during her time as Director has developed a reputation as a leader in interprofessional education in Australia.
1G-1. Travels Through the Professions: An experience in full implementation of IPE in a University setting

Oral Presentation

- Carole Orchard, Western University, London, ON, Canada
- Mary Beth Bezzina, Western University, London, ON, Canada
- Ann MacPhail, Western University, School of Physical Therapy, London, ON, Canada
- Kayla Glynn, Brescia University College, London, ON, Canada

Submitted abstract:

**Background:** The challenge in integrating IPE learning in which student learn with, from, and about each other early in their professional programs is an ongoing issue. An embedded IPE program was developed and implemented in September 2013 through Western University in London, Ontario, Canada. All first year students in 8 health professional programs were placed into interprofessional teams, and required to complete 3 IPE team-based learning activities in their first year, and 2 in each subsequent year. To launch the program a face-to-face learning event called ‘Travels through the professions’ was provided.

**Objectives:** During this panel presentation the participants will learn about

1. how integration of IPE learning about health professionals can occur into IPE student teams,
2. the value in having student-to-student learning of IPE,
3. the logistics of moving up to 500 students around 7 sites in a single day,
4. what worked well, and what needed further attention, and
5. plans for next year’s event.

**Methods:** All students were invited to their starting site on a September Saturday morning and then travel through a planned sequence through all sites during the day. Learning provided was developed and delivered by senior students at each site. It was designed to share: (a) information about their profession, (b) settings where they work, and (c) ‘hands-on’ learning activity(ies) about their professional role. A project site with sub-sites for each team was developed allowing for distribution of information to all students through single announcements. Students were required to complete a quiz created by presenting students and reflective about professional roles. An event feedback form was also completed. If the students met the quiz’s pass threshold an automatic certificate was issued. Undergraduate students also received co-curricular credit for this learning event. Students unable to attend in person were provided with a make-up online program developed.

**Results:** Overall attending students did learn about health professionals roles at the beginning of their own role development. We will present a thematic analysis that emerged from the feedback for this event, as well as student volunteers’ evaluation, and from faculty involved in this event.

**Implications:** Providing wide-scale interprofessional learning requires a great deal of planning and involvement of many levels of people within organizations. Significant workload is associated with such events and must be considered within faculty members’ teaching loads. The commitment of all faculty to integrating the learning from such events into a course requirement is essential for full participation of students. Certificates and co-curricular credit are good but not sufficient to stimulate all students to attend this type of learning.

Oral Presentation

- Jennifer Morton, University of New England, Portland, ME, USA
- Karen Pardue, University of New England, Portland, ME, USA
- Shelley Cohen Konrad, University of New England, Portland, ME, USA
- Susan St. Pierre, University of New England, Portland, ME, USA
- Mindy Golden, University of New England, Portland, ME, USA

Submitted abstract:

**Background:** Collaboration and interprofessional communication are hallmarks of team-based care in emerging health care reform. These competencies assume willingness to learn about the roles and values of other professions and to appreciate how combined expertise offers patients quality and effective care. Yet these competencies are rarely intentionally integrated into nursing and medical school curriculum.

Medicine and Nursing are reliant on one another’s skills in the delivery of safe, patient centered care. In order for this to happen, concepts of interprofessional teamwork begin in the academic setting. Institutional and programmatic barriers and archaic educational paradigms have long been reasons why the two haven’t gathered for shared learning experiences.

**Aim/Goals:** The aim of UNE’s shared learning program is to introduce 2nd year medical students and 3rd year nursing students at least twice a year to interprofessional competencies through interactive, case based activities. While the primary goal is to get students talking to one another in an effort to better understand each other’s roles and responsibilities and facilitate heightened communication, a secondary goal is to reinforce content related to a certain health condition already captured in their respective curricula.

**Methods:** During the fall and spring semesters, Nursing and Medicine faculty plan and implement a 2-hour case-based shared learning experience. Tables of students from mixed disciplines and genders engage in experiential learning highlighting participation in case IPE competencies. Story telling, sharing of assumptions, taking time for table dialog and free write represent some of the educational methods used to address common topical areas. Pre and post surveys are conducted and used to help faculty refine content and determine whether learning objectives are met. Themes in student learning, for example, how little and how much students know about each other’s roles and how communication fosters safe, patient centered care, are also assessed.

**Outcomes and Lessons Learned:** To date, faculty organizers have rolled out 3 “Mission Possible” shared learning experiences with a 4th in the planning phase. Topic areas that tie to the IPE competencies have included Immigrant and Refugee Health, Traumatic Brain Injury and social determinants of health. Evaluative data from each experience has resulted in refinements that inform future content and teaching methods. Committed faculty who share the value of IPE competencies are seen as critical in shifting Mission Impossible to Mission Possible.
1G-3. Interprofessional Student-Led Mini-Grants: We fund the IPE curious!

Oral Presentation

- Kris Hall, University of New England, Portland, ME, USA
- Kerry Dunn, University of New England, School of Social Work, Portland, ME, USA

Submitted abstract:

Background: Our goal is to develop collaboration-ready health professionals who have practiced successful teamwork, leadership and hands-on problem solving as part of their education. To that end, we have established a Student-Led Mini-Grant program. These grants fund interprofessional scholarship and research conceived and carried out by students with faculty mentorship.

Presentation Objectives:

1. Illustrate easily replicated template for application and funding formula
2. Demonstrate examples of successful grants
3. Hear from grant recipients about what is next for them

Methods: The presenters will provide the application and marketing materials to enable other institutions to develop their own Student-Led Mini-Grant program. Successful grants are widely varied in their approach and outcomes, presenters will discuss the challenges and opportunities that a small investment in IPE interest generated. Grant recipients share their perspectives on IPE as a result of developing and leading their own research and scholarship efforts.

Results: Knowledge gained from the projects completed so far has led students and faculty to consider varied approaches to IP education and practice. Whether interviewing pain patients with an eye toward utilizing the power of their stories to help others, or providing physical therapy intervention at a Medically Oriented Gym for diabetes patients, students, faculty and clients are actively learning about, from, and with each other.

Implications: Small-scale, hands-on experiences such as these help to create an IP leadership ethic among students that they will carry with them in addition to expertise in their field, making them dynamic members of their future teams. The discipline and organization necessary to apply for and execute a grant, the reassurance of faculty mentorship while providing a valuable community service are a powerful educational combination.

Author Biographies

Kris Hall is the Program Coordinator for the University of New England Center of Excellence in Interprofessional Education. She oversees the weekly IPE event series on campus, and the Student-Led Mini-Grant program. Kris is an MFA graduate of Maine College of Art and the Skowhegan School of Painting and Sculpture. She brings over 20 years of intensive teamwork in higher education and professional theatre to her work at the Center.

Kerry Dunn, Ph.D., JD is currently an Assistant Professor in the School of Social Work at the University of New England. She has over 20 years experience working in jails and prisons as an advocate and educator. She is a founding member of the UNE-CCJ Collaboration, a university-community partnership created to facilitate IPE learning and improve health and social services at the Cumberland County Jail.
1G-4. IPE in intercultural context STEP by STEP

*Oral Presentation*

- **Essi Varkki**, University of Oulu, Oulu, Finland
- **Tiina Tervaskanto-Mäentausta**, Oulu University of Applied Sciences, Oulu, Finland

**Submitted abstract:**
Human capacity building is the uppermost need in the health care education institutions of the southern African context, particularly so in the newly established higher education institutions of medical and health care. I-STEP – interprofessional education project promoting public health organized in partnership by University of Oulu (UO) and Oulu University of Applied Sciences (OUAS) and with higher education institutes from Kenya, Mozambique and Namibia. The project is funded by the Finnish ministry of Foreign Affairs.

The overall objective for the project was enhancing public health in all partner countries, including supporting themes like interprofessional teamwork, patient safety, equality and ethics.

Teacher and student exchange program was funded by the project, as well as an intensive course in interprofessional education, which took place in September 2012 in Windhoek, Namibia. 31 teachers and 11 students from 10 universities from Finland, Namibia and Kenya participated in the course. The topics included participative leadership, professional ethics, theoretical background of IPE, and sharing and planning IPE pilots. Activating and innovative learning methods and e-learning platform were used. All participants shared experiences and learned with from and about each other. Recent information of IPE, developing interprofessional skills and workshops of the course were evaluated most successful and important by the participants. The students gave remarkable input in the success of the course. The participants expressed additional need for these kinds of courses and the similar topics.

The project is taking NEXT-STEP and plans to have the next intensive course in Kenya have been made together with MOI and MMUST Universities. Zambia has been included as a new partner. Collaborating network has been established with other development projects like MEDUNAM (Medical Education in University of Namibia) and CONSAMS (Consortium of New Southern African Medical Schools) also funded by the Finnish ministry of Foreign Affairs.

1H-1. Teams across Contexts: How do healthcare teams differ in how they work?

*Oral Presentation*

- **Deborah DiazGranados**, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- **Nital Appelbaum**, Virginia Commonwealth University, Richmond, VA, USA
- **Alan W. Dow**, Virginia Commonwealth University, Richmond, VA, USA

**Submitted abstract:**
**Background**: The different contexts across which teams provide care have been hypothesized to lead to patterns of collaboration based on the setting. Each context may require different processes of work, communication, and team function. In order to examine this variation, we analyzed team behaviors across three contrasting settings using a theory-driven coding scheme based on organizational science.
**Method:** We recruited healthcare teams from three distinct points across the two dimensional model described by Retchin.1 Team members were asked to participate in a 45-60 minute individual interview regarding processes that occurred around the same randomized patient as well as typical team processes. A detailed coding scheme was used to create meaning from the interview data.1-3 Structured authority and urgency, team processes, and IPE competencies were all coded.

**Results:** A total of three interprofessional teams participated in the study: acute care, code, and rehabilitation. Differences among the dimensions of urgency of care and structured authority were identified across teams. Acute healthcare teams engaged in consultations with other experts with no heightened sense of urgency. On the other hand, the code healthcare team engaged in escalation as urgency for patient care was high. Differences in authority were also observed. While in all teams the ultimate decision is made or approved by the physician, care in the rehabilitation team was more democratic and engaged a variety of expert healthcare providers before final decisions were made on patient care.

**Implications:** We are better able to target educational and clinical training initiatives in team-based care by highlighting situation-specific team processes. Likewise, the moderating effects of context can better explain variations in team-based outcomes.

**Objectives:**
1. Recognize context shapes team behavior.
2. Identify variety of team process behaviors that occur during teamwork.
3. Describe how context-specific team behaviors should shape educational and clinical training.

1H-2. An intervention study on interprofessional practice in intensive care: Effects on conditions, processes, and competence orientation

**Oral Presentation**
- **Andre Vyt**, Artevelde University College & University of Ghent, Ghent, Belgium
- **Bo Vandenbulcke**, Ghent University Hospital, Ghent, Belgium
- **Dominique Benoit**, Ghent University Hospital, Ghent, Belgium

**Submitted abstract:**
This study evaluated the quality of interprofessional teamwork in intensive care, and assessed whether teamwork could be improved through a short-term intervention. Results show clear effectson organizational and process-oriented aspects of interprofessional collaboration.

A key factor in an intensive care unit is the quality of interdisciplinary communication and collaboration between healthcare providers. Few intervention studies exist. The aim of this study was to evaluate the quality of interprofessional teamwork in the surgical unit of the Ghent University Hospital ICU, and to assess whether teamwork could be improved significantly through a specific short term intervention. The 12-week intervention consisted of 1) optimizing, structuring and extending the existing weekly interprofessional meetings with collaborative decision-making and clear communication of goal-oriented actions (including the psychosocial aspects of care), and 2) organizing the maintenance of the effective exchange of information over time between all professions involved, with the help of a digital monitoring information tool. The perceived quality of IP teamwork prior to and after the intervention was assessed with the PROSE Online Diagnostics System (www.prose.eu), a self-assessment toolbox using a validated 60 item questionnaire consisting of 3 subscales on interprofessional teamwork aspects:
organizational conditions, care processes, and attitudes and beliefs as core competence aspects. The impact of the intervention on the total respondent group, between and within 4 subgroups was measured by linear mixed models with random intercept. The intervention had a clear impact on the first and second aspect of interprofessional teamwork for the total group (p<0.001) and within all subgroups of health care workers, taking account of baseline differences between subgroups. Despite the short period of the intervention the results show clear effects on the organizational and process-oriented aspects of interprofessional collaboration. There was no measurable positive effect on competence aspects, as these were not in the focus of the intervention, but results indicate a possible sensitization and raised awareness in the staff.

**Author Biographies**

Andre Vyt is associate professor in human behavior and interprofessional care at Artevelde University College and University of Ghent (Belgium). He also is quality assurance officer in teacher education. After his studies in psychology and educational sciences he worked as researcher (UGhent), associated scientist (NIH, USA), lecturer, and educational innovator. He is founding partner and managing director of the PROSE expertise network in quality management, and chair of the European Interprofessional Practice & Education Network (EIPEN).

Bo Vandenbulcke is clinical psychologist at the Intensive Care Unit of the University Hospital Ghent.

Dominique Benoit is physician at the Intensive Care Unit of the University Hospital Ghent and professor at the Faculty of Medicine and Health Sciences (Ghent University).

**1H-3. Implementing Interprofessional Team-Based (IPT), Patient-Centered, Bedside Rounds in an Acute-care Hospital**

*Oral Presentation*

- Adrian Visoiu, Magee Women’s Hospital of UPMC, Pittsburgh, PA, USA
- Anne Kisak, Benedum Geriatrics at MageeWomen’s Hospital of UPMC, Pittsburgh, PA, USA
- Colleen Tanner, Magee Women’s Hospital of UPMC, Pittsburgh, PA, USA

*Submitted abstract:*

Acute-care hospitals can benefit as much as academic medical centers from applying IPT concepts that focus on timely communication of key information and development and implementation of a cohesive plan of care. We have developed a way to incorporate IPT rounds at the bedside that is both scalable and portable to community hospitals.

Patient rounds at academic medical centers occur at designated times on specialty-focused floors staffed by a specific attending, residents, and students, all of whom see the patient daily. In contrast, patients at community hospitals are generally seen once daily by one provider, either a private physician or hospitalist (and possibly a NP/PA). Moreover, floors in community hospitals comprise a wide variety of medical and surgical patients.

At Magee Women’s Hospital, a 363 bed community hospital, medical patients are cared for by either academic or private physicians with some NP/PA support during daylight hours. We have incorporated interdisciplinary rounds into this setting by overcoming patient geography and by working with all those support services whose patient care responsibilities preclude their availability for protracted rounds.
Our framework can work with a large number of providers with differing schedules and improve continuity and communication between them.

Our model blends the most important concepts of team-based rounds in a way that is feasible for community hospitals. The cornerstone is relying on selected personnel from a variety of disciplines to communicate their input through a nurse clinician. This facilitates development and communication of a clear and cohesive plan of care. With a clear channel for information coming to rounds and a clear plan of care formulated at rounds, team members can more effectively and efficiently complete their responsibilities, avoid duplication of effort, improve continuity, and understand patient care goals and their own and each other’s role in caring for the patient.

Author Biographies
Dr. Visoiu, Clinical Faculty at University of Pittsburgh, has particular interest in Dementia, care of the frail elderly, and osteoporosis. Dr Visoiu is coordinating a UPMC project aimed at improving detection and treatment of delirium in the hospital setting. Dr. Visoiu currently serves as Medical Director for the Benedum Geriatric Clinic, Montefiore Hospital where he provides primary care and consultative services for the elderly.

Anne Kisak, BC-FNP, works for Benedum Geriatrics at Magee Women’s Hospital. She is a graduate of the University of Pittsburgh School of Nursing MSN and BSN programs and Frostburg State University MBA program. Her past job experience includes 20+ years as a nurse at the bedside and also clinical and senior management roles. Past roles have included key roles in system wide operational projects and initiatives, including an international project on computerized physician decision support.

Colleen Tanner is currently pursuing a MSN at Walden University. She is the Unit Director of a busy 36 bed medical unit known for innovation at Magee Woman hospital with a high concentration of geriatric patients within the UPMC system. Colleen uses her past experience as a bedside nurse and clinician in her current role to support, improve, and transform bedside nursing on her unit and across our health care system.

1H-4. Independence at Home (IAH): Marrying Shared Savings with Comprehensive Team-based In-Home Care
Oral Presentation
- Bruce Kinosian, University of Pennsylvania, Philadelphia, PA, USA
- Jean Yudin, University of Pennsylvania, Philadelphia, PA, USA
- Peter Boling, Virginia Commonwealth University, Richmond, VA, USA

Submitted abstract:
Background: Despite technological advances, rapidly increasing numbers of aged persons in our society will include many that have a high illness burden and limited mobility. Better care delivery and financing models are needed to improve quality and to control well documented care fragmentation and resulting excess costs. Evidence from the Veterans Affairs Home-Based Primary Care program (VA HBPC) which enrolls 30,000 veterans in 200+ centers, plus house call programs at several U.S. locations suggests that coordinated home-delivered care by interprofessional teams including physicians, nurse practitioners, social workers, pharmacists and a network of community resources can improve outcomes while reducing costs by 15% to 25%. The VA system is unique, with a centralized budget; and HBPC costs about $10,000 per patient-year. Can this model work in Medicare fee for service?
**Objectives:** Link a clinical team-based care delivery model for immobilized, chronically ill patients with aligned incentives that could be widely, quickly disseminated, improving care and lowering costs.

**Methods:** Team-based home care is being tested in a 3-year national demonstration in the Centers for Medicare and Medicaid Innovation Center, authorized by Section 3024 of the Accountable Care Act. With a 10,000 participant cap, 18 sites are enrolling patients. The demonstration will compare actual Medicare costs to modeled expected costs, retain the first 5% of savings for Medicare, and use remaining savings to reward programs that successfully reduced costs while documenting high quality. The evaluation by independent contractors should be available in approximately 3 years.

**Results:** Members of the advocacy team and one demonstration site will present the clinical and shared savings model, legislative advocacy process, and extensive supporting data from the VA HBPC program and other programs.

**Implications:** The IAH demonstration is potentially poised to become a national benefit and transform interprofessional care of immobile, at-risk seniors.

**Author Biographies**

Bruce Kinosian is an associate professor of medicine at University of Pennsylvania where he has provided clinical care in the home and performed many reported evaluations of team-based geriatric care models and financing, often receiving top honors for his abstracts at academic geriatric meetings.

Jean Yudin, CRNP has led the clinical team at the University of Pennsylvania House Calls program for several years and serves as a board member of the American Academy of Home Care Physicians which provided most of the advocacy effort in creating the Independence at Home Demonstration. Jean is a national leader among nurse practitioners involved in geriatric care.

Peter Boling, MD is professor and chair, Division of Geriatric Medicine at Virginia Commonwealth University where he has led and published on geriatrics and interprofessional care models with a career-long theme of in-home care for frail and at-risk older adults. He was also a principle protagonist in the effort to create Independence at Home.

All 3 authors work in the mid-Atlantic Independence at Home Consortium

**II-1. Transforming Primary Care Through Interprofessional Collaboration**

*Oral Presentation*

- **Anita Nivens**, Armstrong Atlantic State University, Savannah, GA, USA
- **Janet R. Buelow**, Armstrong Atlantic State University, Savannah, GA, USA

**Submitted abstract:**

**Background:** This novel model of interprofessional practice evolved within an urban nurse-managed primary care health center providing care to uninsured, low-income adults. Clinicians recognized that good health is not acquired in a vacuum and that socio-economic and environmental factors profoundly impacted their clients’ optimum health. Furthermore, specialty medical needs often delayed clients from receiving needed care. It was determined that high-level wellness could only be accomplished by addressing the intertwined clinical, social and economic needs of clients; thus an interprofessional health center addressing the “whole” person was developed.
Objectives:
1. To depict a new model of interprofessional practice for vulnerable populations
2. To define the significance of the Social Determinants of Health as a conceptual framework for practice
3. To discuss accomplishments and barriers in the use of this model for integrating primary and specialty care.
4. To stimulate discussion of new strategies for effective interprofessional collaboration.

Results will detail the organizational structure of the interprofessional team that developed as a “team within a team.” The Core Team includes the patient, nurse practitioners, social workers, a health educator and other staff members. The Core Team has access to a family physician as well as consulting medical specialists called Practice Partners. The Core Team develops treatment plans on complex patients in conjunction with the Practice Partners. Collaboration between the Core and Practice Partner Teams uses an electronic platform via the internet as one method of team consultation.

Implications will include discussion of how participants’ own primary care teams can provide more complex and comprehensive treatments to their populations while caring for them in their facilities or settings. Facilitators to services as well as barriers will be addressed.

1I-2. The Experience of Primary Care Team Professionals-interprofessional collaboration in practice

Oral Presentation

- Maura Burke, National University of Ireland, Galway, Ireland
- Margaret Hodgins, National University of Ireland, Galway, Ireland

Submitted abstract:
Teamwork is seen as essential to health care service delivery and has become a central feature of healthcare reform universally. International healthcare policy and organizational restructuring reflect this movement. Sicotte et al. (2002) developed a questionnaire to explore teamwork in the Canadian primary care setting. This research reflects the work of Steiner (1972), Mc Grath (1984) and Hackman (1987) which viewed teamwork performance in terms of an input-process-output model. The emphasis on the process variables is cognizant of the well-established traditional discipline specific roles of healthcare professionals (disciplinary logic) and that of current more complex contemporary healthcare systems where responsibilities are no longer performed solely by medical practitioners but by a more diversified group of health professionals (interdisciplinary logic) and sought to explore how these logics and organizational issues may impact on levels of interprofessional collaboration in practice settings. The Irish Primary Care Strategy published in 2001 (DoHC, 2001) outlined a team-based approach to service provision which resulted in the development of 417 teams nationally. No measurement of current levels of function or what contributory factors may exist has been undertaken.

Objectives: To establish and explore the existing levels of, barriers and facilitators to collaborative practice within primary care teams in Ireland.

Methods: A mixed methods research project is underway which explores the current levels of team function and what the facilitators and barriers are to teamworking in the primary care setting. In phase one 1,000 practitioners across three integrated service areas in the Health Service Executive were
surveyed to establish current levels of team function using a questionnaire (Sicotte et al., 2002), adapted to reflect the Irish context.

**Results:** Results indicate that 21% of respondents do not consider themselves team members, 40% of practitioners do not attend team meetings and 38% of the sample agreed that disciplinary hierarchical status differences exist in practice, which may be disabling to interdisciplinary teamwork. However other interprofessional teamwork variables did reflect more collaborative work patterns.

**Implications:** It will add to understanding the factors which enable or inhibit teamwork. This is essential to enhance interprofessional practice development and health policy in terms of providing appropriate models of training, education, professional and organizational support structures for sustainable collaborative practice.

**Author Biographies**
Maura Burke is a PhD fellow in the Discipline of Health Promotion, School of Health Sciences, National University of Ireland, Galway. Having graduated as a Registered Nurse from Beaumont Hospital in Dublin in 1993 and in Cardiothoracic Nursing from the Royal Brompton Hospital, London in 1996, she has worked in Ireland, the U.K and Australia. Maura holds an M.A in Health Promotion and was awarded a PhD scholarship in 2011 to progress research into interprofessional collaboration in healthcare.

**References**

11-3. Transforming Care Delivery: Redesigning Case Management and Primary Care Roles in Population Health Management

**Oral Presentation**
- **Ann Kunkel**, WellSpan Health, York, PA, USA
- **Karen Jones**, WellSpan Health, York, PA, USA
- **Chris Echterling**, WellSpan Health, York, PA, USA
- **Laurie Brown**, WellSpan Health, York, PA, USA

**Submitted abstract:**
Care Coordination Teams (CCTs) are a system strategy that includes a focus on Patient Centered Medical Home (PCMH)-based care management, transitional care management/home visits for vulnerable patients, and a superutilizer clinic. By changing the orientation of case manager (CM)s and social workers (SW) at the hospital level to collaborate with primary care practice health coaches on care coordination for hospitalized patients, WellSpan Health is improving patient care, patient experience, lowering hospital utilization and improving outcomes. The shift from unit-based inpatient case management staff to a practice-based model required significant workflow and IT enhancements. Care for hospitalized patients is coordinated by a three-person Care Coordination Team (CCT)--a health coach
(HC) located at the PCMH and a hospital-based RN CM and SW. The CCT conducts daily virtual huddles to discuss discharged and admitted patients, weekly huddles to discuss at-risk patients and to create care plans. The CM and SW are present at the practices weekly to help manage the highest risk patients and families.

The CCTs uses a risk stratification tool, based on utilization and practice data, to determine patients who may be at risk for readmission. Stratification criteria includes elevated blood pressure, taking more than 20 medications, reported falls, chronic conditions, and utilization issues, such as multiple emergency visits. The most extreme at-risk patients (superutilizers) are provided primary care in a closed practice (Bridges to Health) where the team supports a highly-facilitated and interactive shared care plan for enhanced patient engagement.

Transitional Care Managers (nurse practitioners) provide high-risk patients with home visits within 48 hours after discharge to assess patients for symptoms, to reconcile medications and directly treat. A cornerstone to their workflow is the reliability that 90% of hospital discharge summaries are completed with 48 hours; 84% available within 24 hours.

Primary mechanisms for success include:

- **Purposeful communication between the HC at the PCMH, the CM and SW.** The hospital-based team has a conference call huddle daily with the HC in the PCMH they support and discusses all hospitalized patients as well as “at Risk” patients—those with significant factors that may lead to a readmission. Current staffing ratio is one CCT per PCMH.
- **PCMH infrastructure:**
  - Point of Care Clinical Decision Making Tool. The tool identifies actionable interventions that enhance patient outcomes and experience.
  - PCMHs have all staff-all provider meetings monthly where they review provider-team quality and patient experience metrics with benchmarks and targets.
  - “Patient Partners” who are members for redesigning care through their PCMHs performance improvement team.
  - Quarterly educational and improvement activities are shared and celebrated.
- **Monthly “CCT Collaborative” assembles all the CCTs for two hours to provide additional skills development support and process improvement planning.**
- **Wellspans uses closely matrixed relationships between specialty practices, PCMHs, and hospital operations to align goals with the patient always the focus.**

Metrics show promising success:  Average Visits 36.3% decrease; Average Charges 44.7% decrease; Readmission Rate 20.6% decrease.

11-4. A Case Study: Advancing Interprofessional Collaborative Practice with Patients and Families

*Oral Presentation*

- **Lesley Bainbridge**, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- **Debbie McDougall**, BC Children’s and BC Women’s, Vancouver, BC, Canada

Submitted abstract:
**Background:** The strategic plan for B.C.’s Provincial Health Services Authority (PHSA)\(^1\) prioritizes patient-centered care. Interprofessional Collaborative Practice (ICP) with patients/families has evidence showing positive impacts on both patient and care provider experiences and outcomes. An Interprofessional Research Collaborative (IPRC) formed at BC Children’s and Women’s Hospital with the purpose of promoting ICP and related research. The IPRC received funding to work with clinical teams to address identified ICP needs using evidenced-informed Knowledge Translation (KT strategies).

**Objectives:**
1. Introduce teams to ICP competencies
2. Create an action plan to integrate ICP in their clinical settings.

**Methods:** The IPRC recruited care providers from six clinical teams, including a patient/family partner, (representing fourteen disciplines) to explore advancing frontline ICP by creating a series of workshops. Workshop one introduced ICP competencies and encouraged teams to reflect with patients/families about current ICP in the clinical setting. Workshop two, teams identified an ICP goal, and designed a preliminary KT action plan. The final workshop (Nov.29\(^{th}\)) allows teams to present their plan to program managers/leaders. Additionally, IPRC members plus professional practice leaders attended a KT workshop focused on ICP promotion to enhance their ability to mentor/support teams long-term.

A baseline survey measured and analyzed the group’s and teams' ICP competency. This survey will be repeated at the final workshop to measure ICP changes.

**Results:**
1. Facilitated reflective discussions allow clinicians the best opportunity to listen to patients’ and families’ voices.
2. Patients and families valued the chance to participate meaningfully.
3. Teams within the organization varied significantly on their ICP competencies.
4. Very few managers and physicians participated initially. However, teams identified their attendance as key for addressing power imbalances and advancing ICP.

**Implications:**
1. Clinical teams require manager and physician support, readiness, backfill, and dedicated work time to transition to ICP.
2. Targeted engagement strategies are required for managers and physicians.

**Author Biographies**
Lesley Bainbridge holds a master’s degree in education and an interdisciplinary doctoral degree with a focus on interprofessional health education. She is the Director, Interprofessional Education in the Faculty of Medicine and Associate Principal, College of Health Disciplines at the University of British Columbia. Dr. Bainbridge has been, and is currently, principal or co-investigator on several research grants and has published in peer reviewed journals and presented at several national and international conferences on IPE.

Debbie McDougall, RN MsN began her career in perinatal nursing over 30 years ago and has since held roles in clinical leadership, learning and development and professional practice. She has been a

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\(^1\) Includes: B.C. Children’s Hospital, Sunny Hill Health Centre for Children, B.C. Women’s Hospital, B.C. Transplant, B.C. Renal, B.C. Mental Health & Addiction Services, Cardiac Services B.C., and, B.C. Centre for Disease Control
consultant with provincial/national partners on innovations to advance leadership, practice education, interprofessional education/practice and research. She is currently Director of Professional in the BC Provincial Health Services Authority (PHSA) engaged in facilitating collaborative practice.

1K. Deliver Value by Design with the Patient and Family Centered Care Methodology and Practice: Improve Outcomes and Experiences while Reducing Costs

Panel Presentation

Program abstract: The Patient and Family Centered Care Methodology and Practice has been shown to be a replicable approach for improving experiences and outcomes while decreasing cost in health care. This six-step approach, which was developed at UPMC and is increasingly being adopted nationally and internationally, builds high performance inter-professional care teams, engages patients and families as full partners in care redesign, breaks down silos between care providers and across the continuum of care, and creates transformational change. This presentation will engage audience members through discussion, videos and an expert panel.

- Pamela Greenhouse, PFCC Innovation Center of UPMC, Pittsburgh, PA, USA
- Anthony DiGioia, III, UPMC, Pittsburgh, PA, USA
- Lisa Schraeder, PFCC Innovation Center of UPMC, Pittsburgh, PA, USA
- Michelle Bulger, PFCC Innovation Center of UPMC, Pittsburgh, PA, USA

Submitted abstract:

Background: The Patient and Family Centered Care Methodology and Practice (PFCC M/P) was used to develop The Bone and Joint Center at UPMC as a replicable implementation mechanism for moving care delivery from the current state to the ideal over the full cycle of care. Critical components of the PFCC M/P include team-based care, educational redesign, improving outcomes, and aligning care delivery with new payment models.

Objectives:
1. View care through the eyes of patients and families
2. Engage patients, family and care providers as full partners in redesigning care delivery
3. Disseminate a simple, replicable and sustainability methodology to cut across inter-professional silos, create high performance care teams, and remove barriers to ideal care

Methods: The six steps of the PFCC M/P can be used in any care setting:
- Step 1: Define the care experience you intend to improve
- Step 2: Form a PFCC Guiding Council
- Step 3: Identify the current state through Shadowing (repeated, real-time observation of patients and families through each segment of the health care journey)
- Step 4: Expand the Guiding Council into an inter-professional PFCC Working Group
- Step 5: Write a shared vision of the ideal care experience
- Step 6: Form PFCC project teams to close the gaps between the current and ideal states

Results: The PFCC M/P, a grass-roots-level implementation tool that since 2006 has spread to over 65 different clinical conditions as diverse as Level I Trauma, Outpatient Mental Health, Bariatrics, and Surgical Services at 8 UPMC hospitals and numerous outpatient sites, has been shown to achieve improved outcomes and experiences and lowered costs – the PFCC Trifecta. It is increasingly being adopted nationally and internationally. The results of the PFCC M/P have appeared in numerous peer-reviewed journals including Clinical Orthopaedics and Related Research, Quality Management in
Healthcare, and Health Affairs. It has also been recognized by the Institute for Healthcare Improvement, the Joint Commission, and the Picker Institute.

Examples of the breadth and depth achieved from over 500 completed PFCC projects include:

1. Total Joint Replacement: Created care pathways and blood conservation program. Results include better than national average clinical outcomes and decreased transfusion rates, finger sticks, length of stay, and costs over the full cycle of care (30 days pre- to 90 days post-surgery).
2. Level I Trauma: Created 3 primary teams to follow patients. Results include: improved transitions in care; continuity of care; communication between patients, families, and care providers; discharge times.
3. Outpatient Services (e.g., Mental Health): Redesigned admission process. Results include: earlier plan of care, increased patient engagement, increased patient satisfaction.

Implications: The PFCC M/P builds high performance inter-professional care teams, engages patients and families as full partners in care redesign, generates an urgency to drive change, breaks down silos between care providers and across the continuum of care, creates transformational change, and provides the focus on our mission which is taking care of patients and their families. The PFCC M/P delivers value with volume and will allow us to succeed in the evolving “accountable care” landscape.

Author Biographies
Anthony M. DiGiioia III, MD is a practicing orthopaedic surgeon and Medical Director of the PFCC Innovation Center of UPMC. Dr. DiGiioia developed the PFCC Methodology and Practice to improve patient outcomes and experiences while lowering costs. He serves on the faculty of the Institute for Healthcare Improvement and received the Pittsburgh History Makers Award in the area of medicine and health.

Pamela K. Greenhouse, MBA is Executive Director of the PFCC Innovation Center of UPMC. She holds an M.B.A. in Organizational Behavior and has over 20 years of experience in health care strategy, operations management, and program development. Ms. Greenhouse has published over 25 manuscripts in peer-reviewed scholarly journals on a variety of health care topics including patient centered care, organizational models, change management, and process innovation.

Patricia Embree is Senior Director of the PFCC Innovation Center of UPMC. With over 20 years of experience in both clinical and non-clinical health care operations, she has held a variety of roles in Nursing, Healthcare Marketing, Community Outreach and Information Technology. She is responsible for the development and coordination of activities associated with the facilitation and exportation of the PFCC Methodology and Practice.

1M. Interprofessional performance in practice: interprofessional education to support interprofessional collaborative practice

Panel Presentation

Program abstract: This presentation will provide a brief overview of the collaborative journey to develop the innovative joint accreditation between the Accreditation Council for Continuing Medical Education (ACCME), Accreditation Council for Pharmacy Education (ACPE) and the American Nurses Credentialing Center (ANCC). It will also provide examples of interprofessional education activities, and outcomes achieved by Jointly Accredited organizations including universities, healthcare systems, governmental agencies and private education companies.
Submitted abstract:
Beginning in 1998, the Accreditation Council for Continuing Medical Education (ACCME), Accreditation Council for Pharmacy Education (ACPE) and the American Nurses Credentialing Center (ANCC) began the process of aligning the three accrediting systems to create a unified “joint accreditation” process for organizations that develop education for the healthcare team. The goals of this joint accreditation are to support interprofessional collaborative practice (IPCP) through interprofessional continuing education, and at the same time to streamline the accreditation processes. Interprofessional education (IPE) is designed to address the professional practice gaps of the healthcare team using an educational planning process that reflects input from those healthcare professionals who make up the team. The education is designed to change the skills/strategy, performance, or patient outcomes of the healthcare team.

The planning process for educational activities classified as “interprofessional” must demonstrate:
- An integrated planning process that includes health care professionals from two or more disciplines
- An integrated planning process that includes health care professionals who are reflective of the target audience members the activity is designed to address
- An intent to achieve outcome(s) that reflect a change in skills, strategy or performance of the health care team and/or patient outcomes
- Reflection of one or more of the interprofessional competencies to include: values/ethics, roles/responsibilities, interprofessional communication, and/or teams/teamwork
- The presentation will provide a brief overview of the collaborative journey to develop this innovative accreditation, examples of interprofessional education activities, and outcomes achieved by Jointly Accredited organizations including universities, healthcare systems, governmental agencies and private education companies.

1R-1. Partnering with Health Care Mentors to Enhance Interprofessional Collaboration Competencies: Evidence for Effectiveness in Preparing Students to be Part of the 21st Century Workforce

Oral Presentation
- Robert Wellmon, Widener University, Chester, PA, USA
- Linda Knauss, Widener University, Chester, PA, USA
- Normjean Colby, Widener University, Chester, PA, USA

Submitted abstract:
Background: An increasing number of academic institutions are including opportunities for interprofessional learning (IPL) and collaboration (IPC) in the curriculum of its students studying to become health care and human service professionals. Health care mentors (HCM), or individuals who are living with one or more chronic health conditions, may offer the opportunity to create high impact and authentic IPL experiences.
**Objectives:** The purpose of this presentation is to report the findings from a study that examined the effectiveness of a six-hour curricular experience involving HCM in changing student attitudes toward IPL and IPC.

**Methods:** Learning was assessed using a mixed methods approach. Pre and post-IPL surveys using the Interdisciplinary Education Perception Scale (IEPS) and the Attitudes Toward Health Care Teams Scale (ATHCTS) were completed by students (n=21) in clinical psychology, nursing, physical therapy and social work. A control group that did not participate in the IPL experience was also included in the analysis. Between and within group differences were examined using a 2 (control versus IPL) by 2 (pre versus post-IPL) repeated measures ANOVA. In addition, discipline-specific focus groups were conducted to further investigate the students’ perspectives on the IPL activity.

**Results.** No statistically significant between group differences were found for the pre-IPL surveys. Statistically significant pre versus post-IPL differences for the IPL group were found for the IEPS subscales examining attitudes toward competency and autonomy, the need for cooperation and perceptions of cooperation. In addition, the IPL group demonstrated statistically significant within and between group differences for the three ATHCTS subscales. The focus group identified the following key themes: (1) openness by the group to communication; (2) respect among the disciplines during the team meeting; (3) identified the value of incorporating ideas from other disciplines and the HCM; and (4) highlighted the importance of the process for providing patient-centered care.

**Implications:** The findings support the effectiveness of partnering with HCM to create an authentic learning experience that has the capacity to positively changing student attitudes toward learning “from, with and about” peers in other professional disciplines and working collaboratively. A relatively short high-impact learning experience can have positive learning outcomes.

**Author Biographies**
Normajean Colby, PhD, RN, CNE, CPN is an Assistant Professor at Widener University in the School of Nursing. Her clinical and research interests include health promotion in children and pediatric nursing, men in nursing, nursing education, interprofessional education/collaboration and diversity in nursing.

Linda K. Knauss, PhD, ABPP is a Professor at Widener University in the Center for Graduate Clinical Psychology and the Director of Internship Training. Her research and clinical interests include training and supervising psychologists, ethics and professional issues, child, adolescent and family therapy and interprofessional teaching and learning.

Robert Wellmon, PT, DPT, PhD, NCS is an Associate Professor at Widener University in the Institute for Physical Therapy Education. His professional interests involve the examination of factors affecting functional task performance in older adults and patients recovering from stroke and traumatic brain injury, outcome measures used in clinical practice, and interprofessional education and collaboration.

1R-2. The Richmond Health and Wellness Program (RHWP): Coordinating Care for Community-Dwelling Older Adults through Student-led Interprofessional Collaborative Practice (IPCP) Teams

*Oral Presentation*
- **Kelechi C. Ogbonna**, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
Submitted abstract:

Background: Pressured by an aging and increasingly complex population, healthcare delivery and health professions education is undergoing change. Rising healthcare costs and marked variability in the intensity of care without corresponding improvements in population health suggests opportunities for improved coordination. Often, populations with high burdens of chronic illness and poorly coordinated care cluster in healthcare ‘hotspots’ that can benefit from targeted healthcare interventions. RHWP is an innovative, interprofessional program situated in a hotspot that serves as an ideal training location for collaborative practice while also improving the health of the population served.

Methods: In collaboration with VCU Schools of nursing, pharmacy, medicine, and social work, a community based IPCP and transitional care model was developed to provide care coordination and health promotion to a community of low income, urban elders within a high-rise apartment building. At the clinic, nursing and pharmacy co-lead a collaborative team of students from each discipline that provides care with evidence-supported principles of effective care coordination. The program’s purpose is to improve student competencies related to community-based IPCP and improve health outcomes in this patient population.

Results: 692 care coordination visits were completed by collaborative interprofessional teams of students during its first 14 months of operations. The clinic currently enrolls 102 of 247 residents who live at that address. Factors contributing to success to date include: collaborative interest and commitment from schools’ leadership; faculty and student education in basic IPE concepts; and a flexible implementation schedule to accommodate existing curricular schedules. A full description of clinical activities and educational and health outcomes will be presented.

Conclusion: Developing and implementing innovative community-based IPCP models of care has the potential to impact healthcare delivery and health professions education. This program has demonstrated the capacity to engage students in interprofessional training that and seeks to improve population health.

1R-3. Build It and They Will Come: An Interprofessional Faculty and Student-Run Free Clinic

Oral Presentation

- Ann Ryan Haddad, Creighton University, School of Pharmacy and Health Professions, Omaha, NE, USA
- Martha Todd, Creighton University, College of Nursing, Omaha, NE, USA

Submitted abstract:

Background: There are 1007 free clinics operating in 49 states. Annually, these clinics provided care for 1.8 million individuals, accounting for 3.5 million medical and dental visits.1 There are more than 6,500 food pantries in the United States.2 A needs assessment at a local food pantry identified limited access to health care, little or no health insurance, and low health literacy were contributing to the development of many preventable diseases in the community. Thirty percent of the diverse client population live below the poverty line and nearly 34% don’t have health insurance.
Faculty from nursing, medicine, occupational therapy, pharmacy, social work, and dentistry collaborated with the food pantry with the common goal of providing health care services, service-learning experiences for students, and opportunities for interprofessional collaboration. The free clinic is open during the weekly food pantry day to reach as many clients as possible.

**Objectives:** To describe the development of a free clinic, the interprofessional team, health services, and the natural integration of interprofessional core competencies.

**Methods:** A weekly free clinic is staffed by a nurse practitioner, pharmacist, and students from nursing, medicine, pharmacy and social work programs. Students are in different stages of their professional programs. Approximately 15-20 clients are seen each week.

**Results:** The clinic has been open since 2010 with the team expanding to nurse practitioner, pharmacy, medical and social work students. Client services have expanded to include laboratory evaluations, prescription assistance, and dental clinic. In addition to demonstrating core competencies for interprofessional collaborative practice, students gain a better understanding of health literacy, cultural competence, and access to healthcare issues.

**Implications:** Food pantries and community centers are a natural fit for free clinics when clients have limited resources. The clinic has provided meaningful interprofessional team experiences for health science students. Faculty have collaborated to develop scholarly projects and an interprofessional course.

**References**

**Author Biographies**
Ann Ryan Haddad, Pharm.D. Dr. Ryan Haddad serves as the Director of the Office of Interprofessional Scholarship, Service and Education and she is an Associate Professor in the Pharmacy Practice Department at Creighton University School of Pharmacy and Health Professions. Her clinical experience includes consultant pharmacy practice in ambulatory geriatric and long-term care. She offers a clinical rotation in Community Health Engagement. Her areas of interest are interprofessional education, health promotion, and community engagement.

Martha Todd, MS, APRN-NP-C Martha Todd is an Assistant Professor in the College of Nursing at Creighton University. She is a Family Nurse Practitioner and is the primary care provider in a free clinic in an underserved area in Omaha, Nebraska. Her clinical interests include interprofessional education and health disparities. Her areas of teaching include health assessment and care management for both traditional and accelerated undergraduate nursing students.

**1R-4. Innovations in rural undergraduate interprofessional education at a student run service learning center in South Africa**

**Oral Presentation**
- **Jana Muller,** Stellenbosch University, Ukwanda Centre for Rural Health, Worcester, Western Cape, South Africa
Submitted abstract:

Background: The South African Re-engineered Primary Health Care Plan 2010 reported that ‘insufficient attention has been given to the implementation of the primary health care (PHC) approach’. As a result, South Africa requires a decentralisation of health care services and professionals who are competent and able to collaborate as interprofessional teams. The core concept of the reengineered PHC strategy is the primary prevention of disease and disability by means of community access in health teams doing home visits from a district clinic. Collaborative health care has been defined by the WHO as interprofessional teams of health care workers providing comprehensive services in partnership with the community.

Content: The need for a national change in the approach to health care and education inspired Stellenbosch University to pilot a programme of interprofessional investigation at a PHC level in a rural community in South Africa, where the Ukwanda Rural Clinical School opened in 2011. An interprofessional group of health and social science students mobilise on foot into the community with community health workers to screen households for medical, social and environmental risk factors, they then decide on a management plan for the risks identified and learn to make appropriate referrals within the context of rural health. The aim of the project is to help foster ‘citizens of change’ through trans-formative learning by exposure to a rural context and its challenges. This presentation is to share the project and the coordinator’s reflective processes involved in trying to achieve the aims.

Conclusion: On reflection the benefit to the students during their involvement in this project indicates deep learning and growth as individuals. Their knowledge of other disciplines, available health care services and the complexities of health care in their own country is broadened, which will ultimately contribute to their growth as health care professionals.

1S-1. Development of a standardised and validated instrument to measure outcomes of interprofessional education in pre-qualification health sciences students

Oral Presentation

- Matthew Oates, La Trobe University, Melbourne, Victoria, Australia
- Megan Davidson, La Trobe University, Melbourne, Victoria, Australia

Submitted abstract:

The design of interprofessional education curriculum and training should be based on sound evidence. To achieve this, educators and curriculum designers need to be able to make valid and reliable interpretations of data collected using instruments capable of providing such interpretations. A number of instruments are currently available to measure outcomes of interprofessional education. However, the validity and reliability evidence to support their use is variable. The absence of an instrument with sound psychometric properties is a fundamental barrier to the field of interprofessional education research. Using an item response modelling approach, the author is developing an instrument to measure outcomes of interprofessional education in pre-qualification health professional students. Development is being guided and informed by the American Educational Research Association’s Standards for Educational and Psychological Testing and the typology of interprofessional education.
outcomes developed by the Joint Evaluation Taskforce (JET). The primary objective is to develop an instrument with demonstrated validity, reliability and responsiveness in the hope that many of the limitations of extant instruments can be overcome. The results of early development and design work of this instrument will be presented.

**Author Biographies**
Matthew Oates is a Lecturer and PhD candidate at La Trobe University in Melbourne, Australia. His background is in Podiatry and prior to commencing his PhD, Matthew implemented and co-ordinated a large, multi-campus interprofessional common first year health sciences program at La Trobe. His doctoral research is focussing on the development of an instrument to measure interprofessional education outcomes in pre-qualification health professional students.

**1S-2. Evaluation of a 4-year IPE curriculum for undergraduate health sciences university students through measuring changes in readiness for IPL**

*Oral Presentation*
- **Yumi Tamura**, Jikei Institute, Graduate School of Health Care Sciences, Osaka, Japan
- **Teppei Yamashita**, Jikei Institute, Graduate School of Health Care Sciences, Osaka, Japan
- **Peter Bontje**, Tokyo Metropolitan University, Tokyo, Japan
- **Noriko Nagao**, Kobe University, Graduate School of Health Sciences, Kobe, Japan

*Submitted abstract:*
An IPE curriculum has been developed and implemented across the four year program of B University’s Faculty of Health Sciences since 2007. At ATBHV we reported initial evaluations using the data of two cohorts who had completed two or three years of the IPE curriculum and of three cohorts’ first year IPE curriculum experiences. The present paper will build on those studies’ results and aims to provide an overall evaluation of the 4-year IPE program. The analytic results will be used to answer the following questions:

1) Do students who have completed the four year IPE curriculum demonstrate higher readiness for interprofessional learning upon completion of the course?

2) What are the changes in readiness for interprofessional learning in those students, i.e. is there a negative influence of the more frontal teaching style of the 2nd year subject, or do the more clinically oriented components have a more positive influence?

*Methods:* The subjects for this study were the students from two cohorts who completed the full four year IPE curriculum, each consisting of 80 nursing students, 40 medical laboratory students, and 20 students each for occupational and physical therapy. Data were generated from students’ self-administered Readiness of Interprofessional Learning Scale (RIPLS). We previously developed a Japanese version of Parsell and Bligh’s original RIPLS. The 0.74 Cronbach Alpha indicates that this Japanese RIPLS can be used in undergraduate health sciences students. (However, this analysis will only use the overall RIPLS scores as further developments of the subscales are needed too.) To answer the research questions the statistical analysis will consist of the Kruksal-Wallis & Dunn-Procedure (modified Bonferroni). Statistical analyses are computed with aid of SPSSver16 software. The university’s ethics review board approved this study.

*Results and Discussion:* The final results will be presented and discussed in the conference presentation. Results so far have shown that RIPLS scores are more favourable to the IPE-curriculum components with
lots of activities in interprofessional groups as compared to those components that have more lecture-types classes.

1S-3. Assessment and Evaluation in Interprofessional Education: Findings and Recommendations from a Multi-Methods Study

Oral Presentation

- Amy Blue, University of Florida, Gainesville, FL, USA
- Benjamin Chesluk, American Board of Internal Medicine, Philadelphia, PA, USA
- Lisa Conforti, American Board of Internal Medicine, Philadelphia, PA, USA
- Eric Holmboe, Accreditation Council for Graduate Medical Education, Chicago, IL, USA

Submitted abstract:

Background: Interprofessional education (IPE) is rapidly expanding, accelerated with the publication of interprofessional competencies in several countries and inclusion of IPE in health professions accreditation standards, most notably the United States. However, assessment of learners and evaluation of programs remains challenging for the field.

Objectives: Project objectives were to 1) determine current assessment/evaluation practices in IPE, 2) identify gaps in current assessment/evaluation practices, and 3) recommend next steps for the field.

Methods: A multi-methods approach was used, involving a) a literature review of assessment/evaluation practices and tools; b) in-depth interviews with 20 US and Canadian IPE program leaders to determine “on the ground approaches” in assessment/evaluation, including challenges to conducting these; and c) an expert meeting designed to solicit feedback on initial project findings (i.e., literature review and content analysis of interview data), identify assessment/evaluation needs and possible approaches to address those needs.

Results: A diverse collection of methods and tools are used to assess/evaluate IPE learners/programs. Most assessment focuses on learner attitudes; behavioral-based assessments are few in number. Unlike some Canadian programs, most US institutions have not developed an explicit program-evaluation framework. There is a small and growing literature indicating evidence of the effectiveness of IPE, but it is based on studies in different settings, with different interventions and measured outcomes.

Implications: There is need for robust assessment/evaluation in IPE and assessments that target behavioral outcomes. Standardized use of common tools can help new programs avoid “re-inventing the wheel”, and allow for local adaptations. Longitudinal assessment from diverse data streams is crucial. As health care systems seek graduates with demonstrable interprofessional collaborative practice knowledge and skills, it is imperative the field develop more rigorous assessment/evaluation methods and tools. These could include portfolios, assessment rubrics, and objective structured clinical exam type formats.

Author Biographies

Amy V. Blue, PhD: Dr. Blue is the Associate Vice President for Interprofessional Education at the University of Florida and has been engaged in interprofessional education (IPE) program development and assessment for several years, including establishment of the IPE program at the Medical University
of South Carolina. This presentation is based on a project funded by the Robert Wood Johnson Foundation of which Dr. Blue served as the principal investigator.

Benjamin Chesluk, PhD: Dr. Chesluk is a research associate at the American Board of Internal Medicine and has been engaged in multiple research projects related to assessment of physician competency. Most recently, he has developed a multi-source teamwork assessment instrument for hospitalist physicians. This presentation is based on a project funded by the Robert Wood Johnson Foundation of which Dr. Chesluk served as a co-principal investigator.

Lisa Conforti, MPH: Ms. Conforti is a research associate at the American Board of Internal Medicine and is engaged in multiple research projects related to assessment of medical resident and physician competency. This presentation is based on a project funded by the Robert Wood Johnson Foundation of which Ms. Conforti served as a co-principal investigator.

1S-4. Communication Between Physicians and Home Health Nurses After Hospital Discharge: Measurement, Quality, and Outcomes

*Oral Presentation*

- **Matthew Press**, Weill Cornell Medical College, New York, NY, USA
- **Linda Gerber**, Weill Cornell Medical College, New York, NY, USA
- **Timothy Peng**, Visiting Nurse Service of New York, New York, NY, USA
- **Michael Pesko**, Weill Cornell Medical College, New York, NY, USA

**Submitted abstract:**

**Background:** To coordinate care and potentially prevent hospital readmissions, home health nurses must be able to communicate with their patients’ physicians.

**Objectives:** To develop a method to systematically analyze attempts by home health nurses to communicate with physicians, to use this method to identify communication success/failure, and to assess the association between communication success/failure and hospital readmission.

**Methods:** Retrospective cohort of 6,741 Medicare beneficiaries with congestive heart failure who received home nursing care following a hospital discharge in 2008-09. We developed a natural language processing (NLP) algorithm to interpret free-text data on communication attempts entered by home health nurses in the electronic medical record. The algorithm was designed to classify each communication attempt into categories of success/failure. We defined various patient-level measures of communication success/failure and used logistic regression to estimate the effect of these measures on the risk of 30-day readmission.

**Results:** Of the 15,518 total nurse-physician communication attempts for the study population, 47% were classified as successful (conversation with physician), and 6% were classified as failed (unable to communicate with physician or staff or to leave a message). An external validity test of the NLP algorithm (in comparison to 3 independent nurses) showed a high degree of reliability in distinguishing failed versus non-failed communication attempts (kappa=0.850, p<0.0001). A mean of 8% of communication attempts failed per episode of home care, while a mean of 45% were successful. All patient-level measures of communication failure were associated with higher readmission rates; however, the association was not significant with adjustment for patient, nurse, physician, and hospital.
There was a small, but significant, non-linear (U-shaped) relationship between the mean number of successful attempts and higher risk of readmission.

Implications: There is an opportunity to reduce communication failures between home health nurses and physicians after hospital discharge. In addition, NLP is a valid method to systematically identify communication failures in health care and warrants further investigation.

2A. New Approaches for Evaluating the Effectiveness of Linking Interprofessional Education and Collaborative Care Practice

Workshop

Program abstract: The focus of this workshop is to explore and develop program evaluation plans and processes for interprofessional education and collaborative care training in academic and clinical practice settings. This workshop will utilize the US government Field Guide to Training Evaluation. Special focus will be placed on using Kirkpatrick Business Partnership Model™ in an effort to evaluate the effectiveness of linking education and practice for interprofessional education and collaborative care.

- Robin Harvan, MCPHS University, Boston, MA, USA

Submitted abstract:

Workshop Description: The focus of this workshop is to explore and develop program evaluation plans and processes for interprofessional education and collaborative care training in academic and clinical practice settings. This workshop will utilize the US government Field Guide to Training Evaluation (January 2011) to explore and apply several training industry standard principles, techniques and models, including the Context, Input, Process, Product (CIPP) Model; Training Validation System (TVS) Approach; Input, Process, Output, Outcome (IPO) Model and Kirkpatrick Four Levels™ outlined in the guide. According to the US Federal Government and the Office of Personnel Management (OPM), “training evaluation is an objective summary of quantitative and qualitative data gathered about the effectiveness of training. The primary purpose of evaluation is to make good decisions about use of organizational resources. Training evaluation data helps the organization to determine whether training and subsequent reinforcement is accomplishing its goals and contributing to the agency [organization] mission. It also helps agencies [organizations] decide how to adjust the training and other interventions for greater effectiveness.” Special emphasis will be placed on designing Competency-Based Assessment of interprofessional core competencies (behavior outcomes according to Kirkpatrick’s Level 3) and planning Impact Evaluation of the results of interprofessional collaborative care training (according to Kirkpatrick’s Level 4). Special focus will be placed on using Kirkpatrick Business Partnership Model™ in an effort to evaluate the effectiveness of linking education and practice for interprofessional education and collaborative care.

Workshop Objectives and Intended Outcomes: The objectives and intended outcomes of this workshop are to:

- Focus on the importance of linking interprofessional education and collaborative care practice.
- Distinguish concepts of Competency-Based Education and Assessment of core competencies common to all health care professionals, and core competencies specific to collaborative care practice.
- Explore the benefits and advantages of involving health care organizations and stakeholders in determining targeted outcomes for the effective linkage interprofessional education and collaborative care practice.
• Present and discuss Kirkpatrick Four Levels™ and modified models for evaluating health professional education.
• Present and discuss the New World Kirkpatrick Four Levels™ for evaluating training effectiveness.
• Present and discuss the principles and steps of the Kirkpatrick Business Partnership Model™ for evaluating training effectiveness.
• Use interactive strategies to explore the 3 stages required to demonstrate the effectiveness and value of interprofessional workforce training to achieve the short-term and long-term benefits of collaborative care practice: Planning the Evaluation, Executing the Evaluation Plan, and Reporting the Evidence-Based Demonstration of Value.

Workshop Format: This interactive workshop will engage the participants actively in learning new information and techniques. The use of interactive techniques include the following: (1) brainstorming solutions, (2) working from participants' questions or issues raised, (3) having participants work on problems or answer questions in small groups, and (4) sharing solutions with the entire group. In this workshop:
• Participants will share their own experiences and ideas.
• Participants can analyze problems or difficulties in order to figure out solutions.
• Participants will have opportunities to apply new information to their contextual situations related to evaluating interprofessional education and/or collaborative practice clinical training.
Participants will be given a workbook to include all handouts, worksheets and references to accompany this workshop.

Author Biographies
Robin A. Harvan, Ed.D.
Professor and Director of Health Sciences Programs
MCPHS University

Served as Senior Advisor, US-DHHS-HRSA-BHP, Rockville, MD (2011). From 1995-2009, served as US-DoD/VA consultant and Acting Deputy Director for Education, National Intrepid Center of Excellence, Bethesda, MD. After two years of federal government service, returned to academia as Professor/Director, Health Sciences, MCPHS University, Boston (current). Served as Director, Office of Education, Executive Director of the Colorado AHEC System, and Special Projects Associate to the VC of Health Affairs/Dean of Medicine at University of Colorado Denver (1995-2009). Served as Chair, Department of Interdisciplinary Studies (1991-1995) and Director, Masters in Health Professions Education Program (1985-1995) at Rutgers, School of Health Related Professions.

2B. Knows, Knows How, Shows How – Who Does It? Using the Inteprofessional Objective Structured Clinical Examination (iOSCE) to Effectively Assess Interprofessional Education Competencies and Professional Activities

Workshop

Program abstract: Assessment of interprofessional education (IPE) competencies and professional activities is challenging. This workshop will focus on the role of the iOSCE to do so. Participants will identify challenges to assessing performance in IPE, design an iOSCE station that incorporates several competencies and plan an iOSCE blueprint to assess multiple competencies.
• Susan J. Wagner, University of Toronto, Toronto, ON, Canada
• Brian Simmons, University of Toronto / Sunnybrook Health Sciences, Toronto, ON, Canada
Scott Reeves, University of California San Francisco, San Francisco, CA, USA

Submitted abstract:

**Background:** IPE instills the knowledge, skills, attitudes and values necessary for interdependent collaborative teamwork with a focus on the efficient delivery of high quality patient/client relational-centred practice. IPE competency frameworks provide a description of the knowledge, skills, behaviours and attitudes required to achieve these outcomes. However, the assessment of performance related to competency in IPE remains a challenge. The objective structured clinical examination (OSCE), a performance-based tool, is often used to assess performance of individual learners, but less frequently to assess IPE competencies in groups of learners. This workshop will focus on the role of the interprofessional OSCE (iOSCE) to assess a variety of competencies and professional activities in IPE.

**Objectives:** Participants in this workshop will be able to:
- Identify challenges to assessing performance in IPE
- Design an OSCE station that incorporates several IPE competencies
- Plan an OSCE blueprint to assess multiple competencies relevant to different health professions and IPE

**Methods:** Using brief didactic presentations and interactive group discussion, this hands-on workshop will provide participants with skills to develop OSCE stations/scenarios and blueprints relevant to IPE. Participants will first explore IPE competency frameworks and how the iOSCE can be used to assess them. They will then observe, analyze and score simulated interprofessional iOSCE scenarios from a DVD. Working in small groups, participants will finally design and discuss iOSCE encounters/stations that incorporate IPE competencies and then engage in whole group discussion. Sharing of experiences and strategies that would further enhance this experience in the participants’ own contexts will complete the workshop.

**Results:** This workshop will enable participants to achieve the stated objectives and obtain a clear understanding of the iOSCE as a performance-based assessment tool that they may then further develop and utilize in their own contexts.

**Implications:** Assessment is a challenging and key component of IPE. This workshop will promote understanding, development and implementation of the performance-based iOSCE to assess student learning of competencies in IPE activities and curricula in participants’ own contexts. Based on knowledge of the roles, responsibilities and relationships of each health profession, individuals and teams can then effectively show how to collaborate to optimize client/patient/family care.

**Author Biographies**

Susan J. Wagner, B.Sc. (SPA), M.Sc. (CD), Reg. CASLPO, S-LP(C) Susan is the Senior Coordinator of Clinical Education and Director of Continuing Education, Department of Speech-Language Pathology, Faculty of Medicine, University of Toronto. As the inaugural Faculty Lead – Curriculum at the Centre for IPE she led the development and implementation of a requisite IPE curriculum. This involved creation and integration of core competencies, learning activities, points for interprofessional education system (PIPEs), assessment, evaluation and faculty leadership. An IPE student award is named in her honour.

Brian Simmons, B.Sc. (Hons), B.M., M.M.Ed., F.R.C.P.C., F.A.A.P. Brian is an Associate Professor, Department of Pediatrics, Faculty of Medicine and Director, Standardized Patient Program, University of Toronto. He is a neonatologist in the Womens’ and Babies Program, Sunnybrook Health Sciences.
Centre. As the inaugural Faculty Lead – Assessment, Centre for IPE, he led the development and implementation of the assessment program for the IPE core competencies. He is the Examination Committee Chair, Neonatal-Perinatal Specialty Committee, Royal College of Physicians and Surgeons of Canada.

Scott Reeves, Ph.D. Scott is the Editor-in-Chief, Journal of Interprofessional Care. Trained in the UK, he is a social scientist who has been undertaking health professions education and health services research. Over the past 20 years he has worked to develop conceptual, empirical and theoretical knowledge to inform interprofessional activities, and has published extensively in the interprofessional field.

2C. Assessment Approaches in Interprofessional Education – How to Get Started

Workshop

Program abstract: Faculty development is needed in IPE assessment and evaluation approaches. During this workshop, participants will: 1) discuss and apply IPE/IPC assessment concepts to create their own assessment activity to implement at their institution; 2) participate in a model faculty development exercise that can be recreated at their own institutions.

- Amy Blue, University of Florida, Gainesville, FL, USA
- Sarah Schrader, University of Kansas Medical Center, Kansas City, KS, USA
- Brian Ross, University of Washington Medical Center, Seattle, WA, USA
- Brenda Zierler, University of Washington, School of Nursing, Seattle, WA, USA

Submitted abstract:

Background: As the demand for health profession graduates who enter practice ready to function in interprofessional collaborative teams increases, documentation of graduates’ readiness for interprofessional collaborative practice (IPC) will increase. Faculty development is needed so that interprofessional education (IPE) programs can develop and implement assessment and evaluation approaches, including the relevant uses of technology. The aims of this workshop are twofold: 1) discuss IPE/IPC assessment design concepts and have participants apply them to create their own assessment activity to implement at their institution; 2) provide a model faculty development exercise that participants can recreate at their own institutions.

Objectives:
1. Discuss assessment design concepts in IPE.
2. Describe possible assessment methods for IPC.
3. Apply assessment design concepts and IPC competencies to develop an assessment activity.
4. Identify methods to conduct a faculty development workshop about IPC assessment design.

Methods: Participants will be introduced to IPE/IPC assessment design concepts and will apply the information in an interactive environment.

1. The session will be introduced and IPE/IPC assessment design concepts presented by the session presenters. (15 minutes)
2. In small groups, participants will apply assessment methods to assess IPE/IPC using competencies via an interactive card game focused on diverse assessment methods and a facilitated debriefing. (40 minutes)
3. In the same small groups, participants will use the information discussed during the card game to design an assessment template and then receive feedback from small group members using think-pair-share technique. (25 minutes)
4. In the large group of participants, how to apply this workshop format at participants’ own institutions will be discussed. (5 minutes)
5. Session presenters will provide a session summary. (5 minutes)

**Results:** Participants will get “two for the price of one” from the workshop. They will gain: 1) knowledge of assessment methods for IPE/IPC and use it to develop an assessment activity for implementation at their institution; and 2) acquire methods for IPE/IPC faculty development that they may implement at their institution.

**Implications:** As employers and residencies seek confirmation that graduates are ready for IPC, IPE programs will need to have methods in place to document learners’ competency attainment. This session will provide participants with knowledge about assessment in IPE/IPC and an opportunity to develop an assessment activity. Additionally, it models an faculty development activity that can be implemented at participants’ institutions to support IPE/IPC.

**Author Biographies**
Amy V. Blue, PhD: Dr. Blue is the Associate Vice President for Interprofessional Education at the University of Florida and has been engaged in interprofessional education (IPE) program development and assessment for several years, including establishment of the IPE program at the Medical University of South Carolina. This presentation is based in part on a project funded by the Robert Wood Johnson Foundation of which Dr. Blue served as the principal investigator.

Sarah Shrader, PharmD: Dr. Shrader is a Clinical Associate Professor in Pharmacy at the University of Kansas Medical Center and in her position, leads interprofessional education activities on campus and in the Family Medicine clerkship specifically. Dr. Shrader has published extensively about IPE and was a member of the Macy Foundation grant on which this session is partially based.

Brian Ross, PhD, MD: Dr. Ross is the Executive Director of the Institute for Simulation and Interprofessional Studies at the University of Washington Medical Center. Dr. Ross has led and developed several interprofessional education activities for faculty, staff and students, and is the co-principal investigator on a Macy Foundation grant focused on simulation learning in interprofessional education. An outgrowth of the grant is a faculty development activity on which this session is based.

Brenda Zierler, RN, PhD: Dr. Zierler is the Co-Director of the Center for Health Science Interprofessional Education, Research and Practice at the University of Washington. Internationally known, Dr. Zierler has been engaged in interprofessional education for several years and has been the co-principal investigator on several Macy Foundation grants related to interprofessional education. One project, focused on faculty development in IPE, serves as the basis of the session to be presented.
**2D. Sustaining the Future of IPE-CP: the Global Research Interprofessional Network (GRIN)**

**Workshop**

**Program abstract:** The Global Research Interprofessional Network (GRIN) members discuss interprofessional education, research and practice competencies and how their virtual network can build research capacity in and improve the rigor of interprofessional education, research and collaborative practice. Participating doctoral students, academics and practitioners will explore how GRIN can foster their scholarly achievements.

- **Annette Iglarsh**, Simmons College, School of Nursing and Health Sciences, Boston, MA, USA
- **John Gilbert**, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- **Ruby Grymonpre**, University of Manitoba, Winnipeg, MB, Canada
- **Chris Green**, University of Essex, Southend-in-Sea, Essex, UK
- **Hossein Khalili**, Fanshawe College, London, ON, Canada
- **Sarah Hean**, Bournemouth University, Bournemouth, England, UK

**Submitted abstract:**

**Objectives:**

1. Discuss the impact of IPEC Core Competencies (cite) and CIHC/PIS Competency Domains Competencies (cite)
2. Identify additional competency needs of students, academics and practitioners to promote evidence-based interprofessional education, research and practice
3. Explore how the Global Research Interprofessional Network (GRIN) can establish and sustain interprofessional knowledge co-production and translation.

Interprofessional education and collaborative practice is guided by the core areas developed by the Interprofessional Practice Education Collaborative (IPEC) and Interprofessional Health Collaborative (CIHC) in the USA and Canada. The challenge is to implement these IPE core areas into settings that traditionally involve multiple disciplines who work side by side; not “to, from and among.” If collaboration, communication and coordination of services are fragmented the quality of patients care diminishes.

Current faculty, researchers and clinicians, proponents of IPE-CP, are working globally to develop IPE and CP opportunities. However, if IPE-CP is to be sustained, the next generation of academics and practitioners must be mentored to seek out IPE-CP learning opportunities, degree programs and research agendas. The Global Research Interprofessional Network (GRIN) is a collaboration that provides such mentoring via their virtual network to prepare the teachers, researchers and practitioners of tomorrow (Thistlethwaite, 2012.) GRIN is currently proposing the Summer Institute and Training Program to bring emerging and expert researchers together to build research capacity in IPE-CP.

In this seminar GRIN members will introduce the IPEC and CIHC models of IPE domains as the knowledge base for the session. In a roundtable format, the presenters will explain how their participation in GRIN has enabled them to collaborate via the virtual network on grant application and produce publications, and research studies that span the academic and clinical environments. The current GRIN membership includes doctoral students, academics, researchers and practicing health and human service/social care professionals (Objective 1) GRIN mentors its members to promote interprofessional education and practice. Students, academics, researchers and clinicians wanting to implement interprofessional education and clinical practice now have a resource for scholarship and an international network of
colleagues to promote interprofessionalism. The current champions of IPE and CP are at different stages of implementing interprofessional curricula and clinical sites; GRIN is creating an opportunity for those beginning in interprofessional education, research and practice to learn from the more experience of established programs. GRIN was developed to establish a knowledge base and communication format that will sustain the evolution of interprofessional education and collaborative practice.

Seminar participants will join an interprofessional team to explore the perspectives and needs of the different professionals by assuming the roles of student, academic, research and practitioners. (Objective 2) The outcome of this session will contribute to the work of academics, researchers and practitioners and enlist current students to select IPE and ICP as a professional goal. GRIN will serve as a resource providing international opportunities for individuals to collaborate and enhance IPE/CP scholarly and clinical agendas. (Objective 3)

To continue evolution of the GRIN network, members are designing the Summer Institute and Training (SIT) This intensive workshop will emphasize building the capacity of emerging researchers in the field of IEC-CP. These researchers will develop research leadership skills to contribute to the strategic direction of GRIN and promote continued evolution of the interprofessional domain in healthcare.

References

- Thistlethwaite, Jill; Journal of Interprofessional Care, 2012 Mar; 27 (2): 107-9

Author Biographies

Z. Annette Iglarsh, PhD, PT is Professor and Chair, Physical Therapy Department, and the Associate Dean of Interprofessional Education at the School of Nursing and Health Sciences at Simmons, Boston Massachusetts, USA. Dr. Iglarsh’s scholarly agenda is in interprofessional education and leadership and speaks on these subjects throughout the United States. She serves on the Massachusetts Board of Allied Health Professionals, an ICP licensing board consisting of Physical Therapy, Occupational Therapy and Athletic Training practitioners.

John H.V. Gilbert, C.M., Ph.D., FCAHS has published and presented extensively on topics in interprofessional education and collaborative practice. Throughout his long career he has served as chair on many national and international boards and committees such as the WHO Study Group on Interprofessional Education and Collaborative Practice, the Canadian Interprofessional Health Collaborative funded by Health Canada and International Healthcare Collaborative. He continues to serve as a consultant to IPE initiatives worldwide.

Ruby Grymonpre, PharmD, FCSHP, Professor, Faculty of Pharmacy, and IPE Coordinator, University of Manitoba. Dr. Grymonpre serves as IPE Educator and co-chair of the Accreditation of Interprofessional Health Education (AIPHE) project. She is on the Steering Committee of the Canadian Interprofessional Health Collaborative (CIHC), CIHC Research and Evaluation Subcommittee and Board of the CIHC. She publishes and presents her scholarly work in IPE-CP program evaluation, clinical placements, academia and practice partnerships, and health human resource.
Chris Green PhD, RN is lecturer and Interprofessional Learning Lead at the University of Essex, United Kingdom. His primary role is in the design and delivery of interprofessional curricula for pre- and post-licensure students. He is a core member of In-2-Theory that aims to enhance and co-produce empirical and theoretical perspectives to inform interprofessional education, research, and collaborative practice.

Hossein Khalili, RN, BScN, MScN, PhD candidate, Professor and Coordinator, BIEN & International Projects & Partnerships, School of Nursing, Fanshawe College, London, Ontario. Khalili’s primary research focus is on IPE for Collaborative Person Centred Practice (IECPCP). Khalili developed and tested a new framework for interprofessional socialization (IPS) to assist learners/educators developing a dual professional and interprofessional identity. He is currently engaged in several IECPCP research projects that include knowledge to action high-fidelity simulation and patient engagement.

2E-1. A Multi-Institution, Interprofessional Study to Understand the Interprofessional Education Collaborative (IPEC) Competencies

**Oral Presentation**

- Alan W. Dow, Virginia Commonwealth University, Richmond, VA, USA
- Deborah DiazGranados, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- Kelly S. Lockeman, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA

**Submitted abstract:**

**Background:** A major advance to support the proliferation of interprofessional education programs that improve interprofessional collaboration was publication of the IPEC competencies. Understanding how students conceptualize the competencies between institutions and across professions is critical to applying them to educational programs.

**Objectives:** To describe the use of an assessment tool based on the IPEC competencies and compare and contrast median scores from four institutions and across health professions.

**Methods:** A self-report questionnaire was developed with 42 items based on the 38 IPEC competencies. The stem ‘I am able to’ was added to the beginning of each item, and each item was then assigned to a 5-point Likert scale. The questionnaire was administered via web survey to students at four universities across a variety of healthcare programs. Data is analyzed to assess differences across institutions and professions.

**Results:** In initial analyses, students \((N=823)\) rate themselves as competent in each of the IPEC domains, but scores differed across institutions. For example, for the values and ethics domain mean ratings were \(M_1=4.30, M_2=4.59, M_3=4.43, \) and \(M_4=4.46\) and the teams and teamwork domain mean ratings were \(M_1=4.01, M_2=4.24, M_3=3.96, \) and \(M_4=4.21\). Ratings in the domain of values and ethics tended to be the highest and ratings in the domain of teams and teamwork tended to be the lowest. A confirmatory factor analysis showed that response domains partially aligned with the initial IPEC domains. Full analyses will be presented to describe programmatic differences and differences across institutions.

**Implications:** A multi-institutional survey of interprofessional competency provided descriptive data of current healthcare professional students. This information is important for educational planners and curriculum developers who seek to educate a healthcare workforce that can collaborate interprofessionally.
Author Biographies

Alan Dow, MD, MSHA is an associate professor in the School of Medicine and assistant vice president of health sciences for interprofessional education and collaborative care. He leads the design, implementation, and assessment of major interprofessional programs across his campus which include five health science schools and a major academic health system. His research has been published in Academic Medicine, The Journal of Interprofessional Care, and The Journal of Continuing Education in the Health Professions.

Deborah DiazGranados, Ph.D. is an assistant professor in the School of Medicine. Her PhD is in Industrial and Organizational Psychology and expertise includes teams, team leadership, collaboration and understanding the implications of diversity on team effectiveness. Debbie’s research has been published in major peer-reviewed journals as Journal of Applied Psychology, Academic Medicine, Current Directions in Psychological Science and The Joint Commission Journal on Quality and Patient Safety.

Kelly Lockeman, Ph.D. is an assistant professor in the School of Medicine and assistant director for research and evaluation in the Center for Interprofessional Education and Collaborative Care. Her professional interests include research and evaluation methods, measurement, and educational outcomes. Her research has been published in Educational Gerontology and the Michigan Journal for Community Service Learning.

2E-2. Achieving Interprofessional Competencies through Clinical Prevention and Population Health Education

Oral Presentation

- David Garr, Medical University of South Carolina, Charleston, SC, USA
- Susan Meyer, University of Pittsburgh, School of Pharmacy, Pittsburgh, PA, USA
- Clyde Evans, A.T. Still University, Kirksville, MO, USA

Submitted abstract:
Background: The Healthy People Curriculum Task Force is an interprofessional partnership convened by the Association for Prevention Teaching and Research with representatives from eight health professions organizations formed in 2003 to address the Healthy People 2010 developmental objective to “Increase the proportion of...health professional training schools whose basic curriculum ...includes the core competencies in health promotion and disease prevention.” The Task Force has developed, among other documents, the Clinical Prevention and Population Health Curriculum Framework (CPPH), which identifies the educational content in the areas of clinical prevention and population health that all health professions students should learn. In 2013, the Task Force created a “crosswalk” curriculum guide illustrating how teaching the core elements in the Framework can achieve the interprofessional education competencies developed by the Interprofessional Education Collaborative (IPEC). Examples from this guide—endorsed by IPEC—will be described during this session.

Objectives:
- Use the curriculum guide to design and implement interprofessional learning experiences that focus on the provision of clinical preventive services and the health of populations.
Methods: The presenters will review the curriculum guide and describe different approaches that can be used to achieve interprofessional competencies while helping students learn to incorporate clinical prevention and population health methods into clinical practice. The ultimate goal is to prepare students to utilize an interprofessional team approach to provide preventive services and improve the health of populations.

Implications: Use of this curriculum guide will help health professions students achieve interprofessional competencies by working together to integrate clinical prevention and population health methods into clinical practice.

2E-3. Impact of a collaborative practice program on a selection of teamwork competences among medical school students

Oral Presentation

- Juan-Jose Beunza, Universidad Europea-Madrid (Laureate International Universities), Madrid, Spain
- Hugh Barr, Westminster University, London, UK
- Leticia San Martin-Rodriguez, Clinica Universidad de Navarra, Pharmacy Department, Pamplona, Navarra, Spain
- Elena Gazapo, Universidad Europea-Madrid (Laureate International Universities), Madrid, Spain
- Eva Icaran, Universidad Europea-Madrid (Laureate International Universities), School of Biomedical Sciences, Madrid, Spain
- Agustín Martinez-Molina, Universidad de Talca, Talca, Chile

Submitted abstract:

Background: Almost everybody agrees on the importance of Collaborative Practice in Health Care work, but it is not clear how to teach it among students.

Objectives: To assess the impact of a Collaborative Practice program on a selection of competencies among 6th year Medical School students from the Universidad Europea (Madrid, Spain). The program was developed applying conflict resolution techniques from business schools (PON, Harvard University) into teaching collaborative practice, focusing on emotions management.

Methods: Interprofessional Training is an elective course in 6th year Medical School, with 3 ECTS (European Credit Transfer System), scheduled to run from April to May 2014. Our goal is to assess a selection of teamwork competencies before, immediately after, and 6 months after the course, among 6th year Medical School students registered for Interprofessional Training. We will interact with students from a non-medical degree, as control group.

After a systematic literature review, we have selected 4 competency domains (communication, collaborative practice, teamwork & leadership, role clarification & interaction) and 11 individual competencies (to value, to correct, conflict resolution, collaboration & trust, commitment, partial status, authority, shared decision-making, autonomy, roles and personal role). We are currently developing the assessment tools for assessing these 11 individual competencies.
**Results:** We expect to objectively assess the impact of Interprofessional Training on the competencies selected, both in the short and in the long term. For this presentation, we will only have information on the short-term effect.

**Implications:** Many groups are wondering how to train both students and professionals on Collaborative Practice. We expect to offer evidence of the impact of this innovative program, and perhaps offer it as a model to follow.

**Author Biographies**
Juan-Jose BEUNZA is a Medical Doctor specialized in Internal and Tropical Medicine, with further training in Epidemiology and Statistics (SM1 Harvard; PhD Navarra, Spain). He worked 5 years in Uganda (Mulago Hospital & Makerere University). He is currently the Director of the Interprofessional and Collaborative Practice Program at the School of Medicine, Universidad Europea (Madrid, Spain). In addition, he offers teamwork management and training to businessmen and CEOs through his own training company.

Hugh BARR is President of CAIPE (Centre for the Advancement of Interprofessional Education, UK), Convener of the World Interprofessional Education and Collaborative Practice Coordinating Committee, Series editor for Radcliffe Press, Emeritus Editor of the Journal of Interprofessional Care, Honorary Fellow and Emeritus Professor of Westminster University and visiting Professor at Curtin University (Western Australia), University of Greenwich, Kingston University with St. George’s University of London, and University Campus Suffolk.

Leticia San Martin-Rodriguez is the Nursing Director of the Hospital Pharmacy at the Clinica Universidad de Navarra, Spain. She completed her PhD on Clinical Teamwork with Dr. D’Amour at Montreal (Canada) and has participated in internationally recognized publications on interprofessional collaboration. In addition, she has been Principal Investigator of several competitive research grants on the topic.

Elena Gazapo is an immunologist, Dean of the School of Biomedical Sciences at the Universidad Europea (Madrid, Spain).

Eva Icarán trained as Clinical Psychologist (PhD) and has a long record as leader of several innovative projects on education of competencies, specifically on active methodologies in higher education and the role of the lecturers in the new European Higher Education Area.

Agustin Martinez-Molina is a Psychologist specialized in competencies assessment and evaluation. He has participated in relevant international publications and is Principal Investigator of several competitive research grants on the topic.

**2E-4. University of Virginia Approach to the Assessment of Interprofessional Teamwork Competencies: Creating Valid and Reliable Collaborative Behaviors Observational Assessment Tools**

**Oral Presentation**
- **Valentina Brashers**, University of Virginia, Charlottesville, VA, USA
- **John Owen**, University of Virginia, Charlottesville, VA, USA
- **Jeanne Erickson**, University of Virginia, Charlottesville, VA, USA
- **Leslie Blackhall**, University of Virginia, Charlottesville, VA, USA
Submitted abstract:

**Background:** In response to new accreditation standards, health professions schools are implementing interprofessional education (IPE) activities and need assessment tools to document teamwork competencies. Few validated and reliable observational instruments that objectively measure interprofessional behaviors are currently available.

**Objectives:** Create Collaborative Behaviors Observational Assessment Tools (CBOATs) and Interprofessional Teamwork Objective Structured Clinical Examinations (ITOSCEs) to measure teamwork behaviors based on a Collaborative Care Best Practices Model (CCBPM) for the management of a patient in respiratory distress.

**Methods:** Interprofessional panels of clinical experts collaboratively created a checklist of profession-specific and interprofessional behaviors necessary to deliver “gold standard” team-based care for a clinical scenario in which a patient is in respiratory distress. This behaviors checklist is the CCBPM for that scenario. One CBOAT for nursing students and one for medical students were derived from the CCBPM by selecting those behaviors appropriate for third year students and mapping them to IPE competency domains. Two simulated Rapid Response ITOSCEs were created also based on the CCBPM in which individual students worked with a standardized physician (nursing students) or standardized nurse (medical students) to manage a standardized patient. Videotapes of these pilot ITOSCEs were used to train standardized patients/providers to use the CBOATs and independently rate students in videotaped ITOSCEs. The process was repeated until inter-rater reliability was achieved for each CBOAT.

**Results:** The use of a CCBPM to create CBOATs and ITOSCEs was effective in creating valid and reliable assessment tools. This process actively engaged expert clinicians and faculty in IPE through their participation and feedback, thus increasing the cadre of individuals who have necessary skills for developing future IPE projects based on other CCBPMs.

**Implications:** This process of creating valid and reliable tools for objectively assessing teamwork behaviors is feasible and can train clinicians and faculty to develop new IPE activities and assessments.

**Author Biographies**

Valentina Brashers MD, FACP, FNAP is a professor of nursing and attending physician at the University of Virginia Schools of Nursing and Medicine. She is the founding CoDirector of the University of Virginia Center for Academic Strategic Partnerships for Interprofessional Research and Education (ASPIRE). Dr. Brashers is nationally recognized for her research and scholarship in interprofessional education and provides consultations on interprofessional education to health professions schools and care delivery organizations across the country.

John Owen EdD, MSc., Clinical Assistant Professor, School of Nursing, and faculty member, School of Medicine, serves as the Associate Director, Center for Academic Strategic Partnerships for Interprofessional Research and Education, as a Co-PI for an IPE project entitled “Bridging the Gap: Developing, Implementing, and Assessing the Impact of Innovative Undergraduate Interprofessional Education (IPE) Experiences Based on Collaborative Care Best Practice Models,” funded by the Josiah Macy, Jr. Foundation, and as a CME Project Manager.

Jeanne M. Erickson, PhD, RN, AOCN is an assistant professor at the University of Virginia School of Nursing. She teaches oncology nursing to undergraduate nursing students, and she is involved in interprofessional teaching and research related to end-of-life care and pain management.
2F. Leveraging the UPMC – University of Pittsburgh Partnership to Achieve the Triple Aim through New Models of Team-Based Care

**Panel Presentation**

An interactive panel of presenters from the UPMC Insurance Services Division will describe four innovative team-based models of care that have improved health care outcomes, reduced costs, and/or enhanced the patient experience. Each presentation will focus on model implementation, team composition and training, results, and plans for scalability and sustainability.

- **Sandra E. McAnallen**, UPMC Health Plan, Pittsburgh, PA, USA
- **Deborah K. Redmond**, UPMC Health Plan, Pittsburgh, PA, USA
- **Lyndra J. Bills**, Community Care Behavioral Health Organization, Camp Hill, PA, USA
- **Denise Stahl**, UPMC Palliative and Supportive Institute (PSI), Pittsburgh, PA, USA
- **Judith W. Dogin**, Community Care Behavioral Health Organization, Children’s Services, Pittsburgh, PA, USA

**Submitted abstract:**

**Background:** As the largest integrated health care delivery and financing system in Western Pennsylvania and one of the few such systems nationally with a top-ranked academic medicine center partner, UPMC is uniquely positioned to design and test innovative models that can improve health outcomes, reduce costs, and enhance patient experience. An important component of these efforts is training, organizing, and incentivizing multidisciplinary teams of health care professionals to more efficiently and effectively meet the needs of defined patient populations. Four UPMC team-based care models are currently operating across the region and/or state: (1) UPMC Health Plan’s Patient-Centered Medical Home (PCMH) provides practice-based care management services, timely and actionable information on cost and quality of care, and outcomes-based payments to participating primary care practices; (2) Community Care’s Behavioral Health Home Plus (BHHP) advances the principles of person-centered, integrated care in order to improve wellness and other outcomes among adults with serious mental illness; (3) UPMC Supportive Services (UPMCCS) works through hospital-based teams to reduce the risk of inpatient readmission and decreased quality of life among members 65 years or older; and (4) Community Care’s School-Based Child Clinical Home (SBCCH) leverages child, family, and community relationships to provide a range of behavioral health services in school settings.

**Objectives:** The common goal of these programs is to advance team-based care approaches for achieving the Triple Aim, with a specific focus on improving care coordination, aligning incentives with quality, and supporting patient engagement in the care process.

**Results:** Ongoing evaluation of these team-based models of care reveals promising and useful results: the PCMH program has demonstrated improvements in quality and a reduction in overall health care costs for the populations served; BHHP has increased individual treatment satisfaction, identified physical health concerns, and trained behavioral health staff to address wellness and physical health conditions; UPMCCS has demonstrated effectiveness in delaying longer times to and less costly readmissions for participating members; and SBCCH has led to improved child and family functioning and child behaviors among program participants.

**Implications:** Integrated delivery and financing systems and their academic partners can play a leadership role in transitioning the U.S. health care system toward team-based approaches that improve care value on many levels, across multiple settings, and for a wide array of patients. Increased attention to training health care professionals on how to work effectively in teams, developing functional
technology to support real-time communication and information sharing, and aligning performance expectations and payment policies with outcomes-based team work could spur the adoption and spread of team-based care.

Author Biographies
Diane P. Holder, MSW is Executive Vice President at UPMC, President of the UPMC Insurance Services Division, and President and CEO of UPMC Health Plan. Her leadership for UPMC, as one of the nation’s leading integrated delivery and financing systems, supports value-driven health insurance coverage and benefit management for over 1.4 million people. Ms. Holder has held numerous leadership positions in health care and is a faculty member at the University of Pittsburgh.

Sandra E. McAnallen, MA, BSN, RN is Senior Vice President for Clinical Affairs and Quality Performance for the UPMC Insurance Services Division and responsible for strategic plan development and implementation of network management and provider relations for all lines of business. Ms. McAnallen has over 35 years of experience in the health care field and was part of the start-up team that established the UPMC Health Plan as a major health insurer in Western Pennsylvania.

James M. Schuster, MD, MBA is Chief Medical Officer for Community Care Behavioral Health and responsible for development, implementation, and evaluation for all behavioral health care services. He is a leader in development of recovery, pharmacy, quality improvement, and physical/behavioral health integration initiatives. He is adjunct faculty at the University of Pittsburgh and Principal Investigator for a three-year grant funded through Patient Centered Outcomes Research Institute (PCORI) to study comparative effectiveness of the BHHP model.

Robert M. Arnold, MD is Professor of Medicine, University of Pittsburgh Division of General Internal Medicine, Section Chief, Palliative Care and Medical Ethics, Director of the Institute for Doctor-Patient Communication, and the Leo H. Criep Chair in Patient Care and Medical Director of the UPMC Palliative and Supportive Institute. His research and educational activities focus on health care ethics, improving doctor-patient communication, and developing specialty educational programs ranging from oncology to critical care medicine.

2G-1. Looking Back to Move Forward: The Interprofessional Journey has Just Begun
Oral Presentation

- **Jeannie Garber**, Jefferson College of Health Sciences and Virginia Tech Carilion School of Medicine, Roanoke, VA, USA
- **Ava Porter**, Jefferson College of Health Sciences and Virginia Tech Carilion School of Medicine, Roanoke, VA, USA
- **David Trinkle**, Virginia Tech Carilion, School of Medicine, Roanoke, VA, USA

Submitted abstract:
This oral presentation will provide participants with insight into an interprofessional curriculum evolution process. Course evaluation processes as well as specific interactive assignment ideas will be shared in an attempt to help others enhance their interprofessional journey.

**Background:** The concepts of teamwork and interprofessional practice and their connection to desired patient outcomes has been a discussion in healthcare for decades. Leaders in education and practice are
challenged to work collaboratively to implement innovative interprofessional education that will prepare healthcare providers of the future to work together to improve patient outcomes (WHO, 2010). The challenge before us is how do we design and deliver the message of Interprofessionalism so that it impacts how healthcare professionals think and practice?

**Objectives:**
- Experience the journey of an interprofessional curriculum in a new medical school and college of health sciences.
- Gain insight into how to use student and faculty feedback to develop active learning strategies.
- Explore highly interactive team based assignments as a way to deliver innovative interprofessional education.

**Methods:** Interprofessional faculty from a new medical school and a college of health sciences formed an interprofessional team of faculty to develop a unique year long curriculum focusing on Interprofessional Leadership for medical, nursing and physician assistant students. The inaugural class began in fall of 2010 and is now in its fourth academic year. Student evaluations (electronic Likert scale) for the 2010-2011 and 2011-2012 academic years revealed discontent with curriculum design, delivery and content. Despite significant changes in the second year student evaluations remained negative. In preparation for the 2012-2013 and the 2013-2014 academic years, facilitated student and faculty focus groups were conducted to gain further insight.

**Results:** This feedback as well as the electronic course evaluations, ongoing review of the literature, and the IPEC core competencies served as the catalyst for yet another curriculum redesign. A highly interactive learning environment was created where interprofessional skills and behaviors are practiced and assessed. Simulated scenarios created an opportunity to practice teamwork, communication, evaluation and feedback skills. Other active learning assignments included the development of an interprofessional oath, planning and implementation of a community service project, and a real time electronic health record review focused on roles, scopes of practice and the evidence of teamwork and in the patient record. An interactive model was also implemented to guide the evaluation process of team function. Lessons learned from this curriculum evolution process will be shared in an attempt to help others enhance their interprofessional journey.

**Implications:** This session will serve as a practical, experienced example of how to create, implement, evaluate and redesign an interprofessional curriculum.

2G-2. Development and Implementation of Interprofessional Patient Safety and Care Planning Tools in an Electronic Health Record

*Oral Presentation*

- **Joanne Maxwell**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Keith Adamson**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Margaret Burns**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada

**Submitted abstract:**
**Description:** This presentation describes development and implementation of two interprofessional electronic documentation tools for inpatient teams in a pediatric rehabilitation setting. The Patient Safety and Care Planning Tools use a combination of a display panel and detailed note to create a comprehensive summary of safety concerns and daily care needs.
**Background:** A review of inpatient EHR tools in 2011 identified need for improvements in Status Board tools that employ a display view to provide an overall picture of care needs and safety concerns. The status board tools (of which there were 5) were noted to contain a great deal of overlapping information and out of date content. These shared tools were accessible to all disciplines, yet there was confusion around accountability for updating information, noted variability in how information was documented, and it was difficult to identify the writer. Many team members felt that the tools were only useful to nursing staff despite the interprofessional intent and design. The tools were not facilitating integrated care and erroneous and out of date content was deemed a risk to patient safety.

**Objectives/methods:** In 2013, an interprofessional working group was formed to review the tools and make recommendations for changes with a focus on patient safety.

**Results and implications:** The result was the development of two new tools designed to facilitate safe, effective interprofessional care delivery. The Patient Safety and Care Planning Tools continue to utilize the display functionality (status board) to provide a quick view of safety concerns and care needs, but the display is now much cleaner. The display component, which is populated from key queries in the full note, is used to highlight issues or needs. The details are found in the full note in our EHR, e.g., the display panel in the Patient Safety Tool alerts the reader that there is a safety risk associated with skin/wound or swallowing with just a few simple words; the detailed information is found in the full note in the EHR. The new tools also ensure that date of entry and signature are easily visible bringing greater accountability and accuracy to the data.

**Author Biographies**
Joanne Maxwell, MSc, BScOT, Project Manager, Collaborative Practice at Holland Bloorview Kids Rehabilitation Hospital. Joanne leads the activities related to improvement and enhancement of the Electronic Health Record with a focus on change management and interprofessional collaboration.

Dr. Keith Adamson is PhD is Senior Director, Collaborative Practice at Holland Bloorview Kids Rehabilitation Hospital. A strong advocate of interprofessional care and practice, Keith has provided senior leadership around the development of Electronic Health Record since 2010.

Margaret Burns, IS Specialist. Margaret is an OT by background and has been involved with the development and build of electronic documentation tools at Holland Bloorview for a number of years. Margaret is our resident expert in Meditech functionality and provides unique insight into both clinical and technical aspects of tool development and implementation.

**2G-3. Uncovering key roles for successful interprofessional education**

*Oral Presentation*

- **Reena Antony,** Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- **Amy E. Leaphart,** Medical University of South Carolina, Charleston, SC, USA

**Submitted abstract:**

**Objectives:**

1. Examine the professional identities of non-faculty in IPE to maximize program success.
2. Recognize characteristics of successful education managers/program administrators within IPE.
3. Define the role of staff necessary within an institution’s IPE framework.
4. Identify non-faculty contributions towards growth and innovation of collaborative learning in education and practice settings.

**Background:** Growth of successful IPE centers and increased innovative IPE initiatives is connected to the role of education managers/program administrators through influence and implementation of IPE activities/programs. Although literature highlighting the value of non-faculty education managers within IPE is scare, the theory of middle managers’ role in healthcare innovation implementation by Birken, Lee, and Weiner (2012) provides initial basis for analysis of those roles.

**Methods:** A case study approach with both qualitative and quantitative data gathered from 10 different successful IPE offices was used to uncover the dynamics of key staff and faculty roles as relevant to institutional IPE success and also patterns that surface in multiple institutions that highlight “best practices” of the roles and skills specific to all involved. Presenters from Rosalind Franklin University and Medical University of South Carolina will highlight these roles and associated skills of non-faculty in IPE.

**Results:** Each institution has a unique framework for implementing IPE initiatives and non-faculty play myriad roles in program successes including curricular design, management, and sustainability.

**Conclusion:** The reality surrounding IPE growth and success is that innovative, multileveled approaches are necessary to overcome both ideological and logistical barriers in academic settings. Endorsing new models with faculty and staff teams cultivates collaborative leadership and engagement in institutional interprofessional education activities. This presentation will discuss lessons learned from facing challenges to new opportunities of professional development and growth.


**2G-4. Advancing Interprofessional Education and Collaborative Practice (IPECP) in Graduate Medical Education in the U.S.**

*Oral Presentation*

- **Dewitt C. Baldwin Jr.**, Accreditation Council for Graduate Medical Education (ACGME), Chicago, IL, USA
- **Joanne G. Schwartzberg**, Accreditation Council for Graduate Medical Education (ACGME), Chicago, IL, USA

**Submitted abstract:**

**Background:** Recent reports on healthcare in the U.S. recommend interprofessional collaboration to improve patient care and safety.

**Objective:** To determine the prevalence and nature of interprofessional training in U.S. residency programs.

**Methods:** Data from the American Medical Association’s AMA-Freida database, where residency programs list “formal interdisciplinary teamwork training” during 2007-2008 and 2012–2013 were analyzed. Residents completing the annual ACGME Resident Survey in 2013 were asked about the number of days they participated in interprofessional activities over the past two weeks.
Results: In 2007-8, 25.9% of 8,716 reporting programs claimed to offer interdisciplinary training, while in 2012–2013, this figure reached 46.2% for 8,868 programs. Specialties reporting higher rates in 2008 included geriatric medicine (IM) 69.4%, and geriatric medicine (FM) 61.9%. Specialties reporting low rates in 2008 included vascular surgery 9.4%, and plastic surgery at 10.6%. Both high and low specialties reported substantial increases in 2013.

Over 21,000 residents responded about interprofessional training activities. One third (32.7%) claimed no such activity during the prior two weeks; about 40% reported interprofessional activities on 1 to 7 days, while 28.3% claimed more frequent activities on 8 to 14 days.

Specialties with high interprofessional training exposure included family medicine, 77.3% of the time, physical medicine 76.6%, and radiation oncology 76.5%, while specialties with lower exposure included dermatology 54.7%, ophthalmology 55.7%, and diagnostic radiology 57.4%.

Significance: In 2002, the ACGME introduced the requirement that residents “work as a member/leader of the healthcare team... to enhance safety and quality of care.” Directors were required to report such activities, but these reports have largely been ignored. The data above suggest that interprofessional activities are increasing substantially.

The next accreditation system (NAS), with specific milestones calling for increased interprofessional activities, should result in greater increases in the future.

2H-1. TDABC + Shadowing: Improving Outcomes, Experiences, and Cost to Succeed in the Era of Accountable Care

Oral Presentation

• Anthony DiGioia, III, UPMC, Pittsburgh, PA, USA
• Michelle Giarrusso, PFCC Innovation Center of UPMC, Pittsburgh, PA, USA

Submitted abstract:

Background: Time-Driven Activity-Based Costing (TDABC) allows identification of the true cost of care at the level of the clinical condition. The Accountable Care Act (ACA) links provider payment to patient-reported experiences and creates new payment programs such as bundled pricing that require us to know our true cost of care.

Shadowing – direct real-time observation of patients through each segment of a health care journey - is a unique tool that augments the accuracy and efficacy of TDABC. Using Shadowing to create the process maps used in TDABC allows us to identify: current state clinical pathways and true cost of care, patient-reported experiences, and opportunities to drive changes that optimize outcomes, experiences, and costs.

Objectives: Understand how Shadowing combined with TDABC provides all of the information necessary to succeed under the ACA.

Method: Shadowing is used to map the current state care pathways of a clinical condition over a full cycle of care. Then the cost of resources (personnel, space, equipment, and consumables) used in each step of the care pathway is identified, allowing calculation of total cost for treating a clinical condition.
Each iteration becomes more efficient as we build a database of resource costs for additional clinical conditions.

**Results:** We have defined the current state clinical pathway and true cost of care for Total Joint Replacement from 30 days pre- to 90 days post-surgery. We have also identified opportunities to improve cost, clinical outcomes, and experiences. The approach is now being applied in additional clinical areas to compare like services and determine applicability to non-orthopaedic clinical conditions.

Implications
1. Identify current state care pathways
2. Benchmark to drive best practices
3. Identify process changes that improve outcomes and experiences and decrease costs
4. Cross silos within health care settings
5. Minimize risk in new payment programs

**Author Biographies**

Anthony M. DiGioia III, MD is a practicing orthopaedic surgeon and Medical Director of the PFCC Innovation Center of UPMC. Dr. DiGioia developed the PFCC Methodology and Practice to improve patient outcomes and experiences while lowering costs. He serves on the faculty of the Institute for Healthcare Improvement and received the Pittsburgh History Makers Award in the area of medicine and health.

Pamela K. Greenhouse, MBA is Executive Director of the PFCC Innovation Center of UPMC. She holds an M.B.A. in Organizational Behavior and has over 25 years of experience in health care strategy, operations management, and program development. Ms. Greenhouse has published over 25 manuscripts in peer-reviewed scholarly journals on a variety of health care topics including patient centered care, organizational models, change management, and process innovation.

Michelle Giarrusso, RN, MS, MBA is a Director of the PFCC Innovation Center. She has over 18 years of nursing experience in direct patient care and nursing management. In her current role, Michelle is responsible for planning, organization, and coordination of PFCC Innovation Center initiatives. She has led the TDABC initiative in The Bone and Joint Center of UPMC and is leading the expansion of the TDABC initiative to additional clinical services.

**2H-2. Improving Inpatient Diabetes Care: Accelerating Change with a Pay for Performance Initiative**

*Oral Presentation*
- **Mary Ellen O’Connell**, Lehigh Valley Health Network, Allentown, PA, USA
- **Joyce Najarian**, Lehigh Valley Health Network, Allentown, PA, USA

**Submitted abstract:**
Our large academic multi-site network found itself faced with clinical inertia and plateaued glycemic control results. Serendipitously we were offered the opportunity to participate in an inpatient diabetes pay for performance project at our smaller campus. Following initial resistance, our focused interprofessional team gained momentum with full engagement. Key strategies included; multidisciplinary education on best practice, enhanced patient education, improved use of technology, real time glycemic feedback, data analysis and transparency, diversifying the team skill mix, and
improved communication among care givers. This presentation will describe how our involvement resulted in improving safety and patient outcomes, including improved hypo and hyperglycemia rates, utilization of HgA1C results, reduced length of stay and costs, in addition to achieving full financial reward for our involvement.

Content Outline
I. Hospital Diabetes Care Challenges
   A. Financial Burden of Diabetes
   B. Reimbursement Concerns
      1) Value Based Care
      2) Readmission Issues
II. Our Diabetes Quality Improvement Efforts
   A. Glycemic Control Efforts and Status pre "Pay for Performance" Initiative
   B. Pay for Performance Initiative Requirements
      1) Clinical Goals
      2) Other improvement expectations
      3) Timeline
      4) Data System Support, Collection, and Reporting
III. Major Interventions for Success
   A. Multidisciplinary team approach and A3 methodology
   B. Multi-disciplinary education on best practice via multiple methods
   C. Daily dashboard reports
   D. Real time glycemic control chart reviews/rounding/feedback
   E. CAPOE order sets/Expert rules
   F. Improved timing of BGM, meal delivery, and insulin timing in an At Your Request Dining Service system
   G. Root Cause Analysis of Severe Hypoglycemia Events
   H. Enhanced patient education
V. Outcomes (Joyce 25 minutes)
   A. Improved use of appropriate inpatient medical regimens
   B. Improved timing of monitoring, meals, and insulin administration
   C. Multiple process improvements to improve network diabetes care and patient safety
   D. Reduced hyper and hypoglycemia rates
   E. Improved acquisition and utilization of A1C results to improve care across the continuum
   F. Improved diabetes patient education processes
   G. Improved team respect, trust, communication, and collaboration
   H. Reduced Length of Stay and Cost per Case
   I. Achievement of pay for performance requirements
   J. Senior Leadership Support
IV. Q/A 10 minutes

2H-3. Integrating a Physical Therapist into the Urgent Care Team May Decrease Health Care Costs and Improve the Patient Experience

Oral Presentation
- Matthew Walk, University of the Incarnate Word, San Antonio, TX, USA
- Amit Mehta, University Health System, San Antonio, TX, USA
- Bhoja Katipally, University Health System, University of Texas, San Antonio, TX, USA
Submitted abstract:

**Background:** There is mounting evidence showing the cost effectiveness and improved outcomes of early intervention by a Physical Therapist (PT) in acute musculoskeletal conditions.

**Objectives:** This pilot study compares the traditional model, in which the PT department manages referrals from the urgent care center, to a new model that includes a PT as part of the urgent care team alongside physicians, physician’s assistants, and nurse practitioners. The goal is to assess the cost-effectiveness and patient benefit realized with the integrated model.

**Methods:** A PT was assigned to an urgent care clinic of University Health System in San Antonio, Texas, twice-a-week for four hours each day. The PT’s presence coincided with a musculoskeletal clinic within the urgent care center. Billing records of patients seen in this model were analyzed for utilization of PT procedures, x-rays, CTs, and MRIs related to musculoskeletal diagnosis. This data was compared to a random sample of patients seen in the traditional model.

**Results:** Wait times to see a PT decreased from 2-3 weeks to 0-3 days. The number of PT procedures in the integrated model was about half that of the traditional model. Use of x-ray, CT, and MRI was over 50% less in those seen in the collaborative model. There was no significant difference in number of emergency center visits between groups. The average cost of care per patient was on average $1500 less in the collaborative model compared to the traditional model.

**Implications:** Access to PT services is frequently delayed as patients move between primary care providers and specialists; sometimes, resulting in extensive work-ups. Eventually, many patients receive PT care, but may require more involved rehab due to chronicity and prolonged debility. A collaborative model has the potential to improve access to care and decrease health care costs.

**2H-4. Attitude and Knowledge of Nurses Regarding Value Based Performance**

*Oral Presentation*

- **Linda A. Dudjak**, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- **Helen K. Burns**, Excela Health, Greensburg, PA, USA

Submitted abstract:

The notion of associating health care reimbursement with nationally endorsed indicators of quality (Pay for Performance) is progressively influential in driving the quality movement forward. Despite studies that demonstrate significant associations between nursing and patient outcomes, nurses have not been involved in policy setting in this area nor have they shared in the financial incentives awarded to high performing organizations. To accelerate the connection between nursing and performance on clinical quality measures, nursing leaders and economists have recommended an incentive based methodology that rewards nursing for its role in quality and safety. The purpose of this pilot demonstration project is to evaluate the impact of a structured education program on the knowledge and attitudes of direct care nurses and nursing leaders regarding value-based care and incentives for quality performance; and to examine the relationship of awarding a financial incentive to nurses and improvement on nursing sensitive quality indicators. In Phase I, nurses and managers from a three-hospital system will receive education on value-based health care. Prior to, at one and six months post education, participants will
complete a questionnaire to assess their attitude and knowledge regarding pay-for-performance and financial incentives. Phase II will involve identifying quality indicators that reflect nurses’ contribution. A targeted level of improvement over baseline will be established for each indicator. At six and twelve months, an incentive will be awarded to the Nursing Division to support a professional initiative or activity selected by the nursing executive team and shared governance leadership council. The improvement on targeted quality indicators will serve as a partial measure of the influence of financial incentive on the nurses’ performance. Moreover, this project provides an opportunity to examine nurses’ attitudes and knowledge regarding this prominent movement in healthcare and acknowledge nurses’ essential contribution to the national goal of efficient, high value care.

Author Biographies
Linda A Dudjak PhD RN, an associate professor at the University of Pittsburgh School of Nursing, teaches at the undergraduate and graduate level and is responsible for several core courses in the MSN and DNP Administration programs. Dr Dudjak has an extensive background as a healthcare executive in both academic and community settings and has lectured locally and nationally on topics related to value-based healthcare quality, clinical outcomes and evidence-based practice.

Helen Burns is Senior Vice President/Chief Nursing Officer at Excela Health and Adjunct Full Professor at the University of Pittsburgh School of Nursing where she previously held the position as Associate Dean for Clinical Education. Dr. Burns holds a bachelor’s degree in nursing from IUP, and received both master’s and doctoral degrees from the University of Pittsburgh. She’s a Fellow in the American Academy of Nursing and member of the Excela Health Board of Trustees.

2I.1.27 Addresses – Ideas for collaborative team based care from twenty-seven novice interprofessional teams

Oral Presentation

- Barbara Maxwell, A.T. Still University, Mesa, AZ, USA
- Janet Head, A.T. Still University, Kirksville, MO, USA
- Carolyn Glaubensklee, A.T. Still University, Mesa, AZ, USA

Submitted abstract:
This presentation examines the work of twenty-seven different interprofessional teams of healthcare students tasked with developing an interprofessional team-based care plan to meet the needs of an individual and their family. All twenty-seven teams worked on the same case.

Teams were asked to:
- Describe the composition of the team, identifying the roles and responsibilities of those involved
- Indicate how they would ensure effective teamwork
- Recommend strategies to ensure effective communication
- Illustrate how they place the interests of the patient and his family at the center of interprofessional health care delivery.
- How they would plan for quality improvement and patient safety.

This presentation explores the common threads and innovative ideas for team-based care generated by collaborative healthcare student teams form four universities. The student teams included the following professions, athletic training, audiology, communication disorders, dentistry, health science, osteopathic medicine, nursing, occupational therapy, physician assistant, and physical therapy.
It provides insight from future healthcare professionals unburdened by the experience of the current healthcare delivery or reimbursement systems. The plans include innovative proposals for using technologies, collaboration in practice, team building strategies, the development of community team-based health care services, and much more.

The Institute of Medicine and the Josiah Macy Foundation have both highlighted the need to think differently, and for change in both the educational and healthcare delivery systems to facilitate collaborative working, in effect changing how we do business. The innovative ideas presented by these interprofessional teams can provide food for thought as to what changes may be possible to ensure quality team-based collaborative care is a possibility for those we serve.

Workshop structure:
- The Product: Participants review posters of the student teams work – Attendees identify the innovative strategies identified by the student groups.
- Group Activity -Reflection: Groups of attendees respond to set questions regarding the innovative strategies identified by the student groups. Questions will address applicability to the current healthcare system, common concepts, and potential lessons from this novice group of health professionals.

**Author Biographies**
Dr. Barbara Maxwell, PT, DPT, MSc, CertTHE, Professor & University Director of Interprofessional Education & Collaboration, A.T. Still University.

Dr. Janet Head, EdD, RN, is Assistant Professor, ATSU’s Kirksville College of Osteopathic Medicine and Co-Director, ATSU-KCOM AHEC.

Dr. Carolyn S. Glaubensklee, Ph.D. in Medical Science, Associate Professor of Physiology and Chair of the Curriculum Committee for SOMA, A.T. Still University, School of Osteopathic Medicine.

Karen Boyd BSN, RN, CMSRN, Lab Coordinator, Grand Canyon University
Dr. Mara Hover, D.O., Associate Chair, Community Medicine, Director, Clinical Education Community Health, Associate Professor, A.T. Still University.

**21-2. Interprofessional learning community students’ perceptions of a case study experience: A qualitative study**

**Oral Presentation**
- **Susan Sterrett**, Chatham University, Pittsburgh, PA, USA
- **Melissa Bednarek**, Chatham University, Pittsburgh, PA, USA
- **Mary Hertweck**, Chatham University, Pittsburgh, PA, USA
- **Susan Hawkins**, Chatham University, Pittsburgh, PA, USA

*Submitted abstract:*
**Background:** Chatham University began an interprofessional (IP) program in the fall of 2012. Curricular design centers on learning communities of 8-10 pre-licensure students from five health profession programs (nursing, physical therapy, occupational therapy, physician assistant and counseling psychology) who remain together over the course of a two year program that includes an initial large group meeting and four small group learning events. Each event focuses on one of the four team-based competencies identified by the Interprofessional Education Collaborative (IPEC). Prior to the beginning of the curriculum, the small group case study was piloted. Focus groups met as part of a qualitative study focused on students’ understandings of professional role through the case study experience.

**Objectives:**
1. Describe student perceptions of the experience.
2. Describe the IP learning community curricular design.
3. Identify strategies for successful design of an IP curriculum using learning communities

**Methods:** In focus groups, students were asked:
- Did you gain an understanding of the roles and responsibilities of other health professionals as you discussed the case?
- Were you able to verbalize your professional role?
- What would have made this experience better for you?

In this IRB approved study there were three focus groups of eight to ten students. The sessions were audiotaped and then transcribed. A grounded theory design as used to code and analyze the data using Dedoose, a web application.

**Results:** Emerging themes of the qualitative study include: value of developing interprofessional relationships; significance of case studies to learning outcomes; understanding of professional role using the case study design.

**Implications:** Recommendations based on the results include the benefit of small learning communities in developing interprofessional relationships. Students favored small group interactions and case studies to allow for deeper understanding of professional roles.

**Author Biographies**
Susan Sterrett is Assistant Professor of Nursing at Chatham University, Pittsburgh, PA. She received a Bachelor of Science in Nursing (1975), Masters of Science in Nursing (1992), and Masters of Business Administration (1994) from Duquesne University, Pittsburgh, PA. In 2008, she completed her EdD in Higher Education Administration from the University of Pittsburgh. Dr. Sterrett’s practice settings include surgery, clinical education and community health nursing – Dr. Sterrett’s research interests center on interprofessional communities of practice.

2I-3. Contextual activity sampling system impacts on clinical interprofessional learning

**Oral Presentation**
- **Hanna Lachmann**, Karolinska Institutet and Sophiahemmet University, Stockholm, Sweden
- **Sari Ponzer**, Karolinska Institutet and Södersjukhuset, Dept of Orthopaedics, Stockholm, Sweden
- **Bjöörn Fossum**, Sophiahemmet University & Karolinska Institutet, Stockholm, Sweden
- **Klas Karlgren**, Karolinska Institutet, Department of Learning, Informatics, Management and Ethics, Stockholm, Sweden
• Unn-Britt Johansson, Sophiahemmet University & Karolinska Institutet, Department of Clinical Sciences, Stockholm, Sweden

Submitted abstract:

**Background:** Learning is not a purely cognitive or individual matter, we have previously described students’ experiences of their academic emotions, e.g. feelings of stress related to clinical interprofessional studies, based on data collected continuously via mobile phones by using the Contextual Activity Sampling System (CASS).

**Objectives:** The objective with this work was to gain deeper understanding about if using the contextual activity sampling system (CASS) impacts on the students’ academic emotions, readiness for interprofessional learning and their experiences of team collaboration during a clinical interprofessional training ward (IPTW) course.

**Method:** CASS is a methodology designed for collecting data about experiences of on-going activities. Frequent distribution of questionnaires by using mobile phones provides detailed data and to repeatedly raise key issues about, e.g., clinical interprofessional learning. Students’ engagement and their reflections about on-going activities are requested for encouragement during clinical practice. Three different data collection methods generating both quantitative and qualitative data were used. Thirty-three students from four different healthcare programs (Medicine, nursing, occupational therapy and physiotherapy) participated. The teams of students were randomized to an intervention group (exposed to CASS) or to a control group (not exposed to CASS).

**Results:** The result showed that the intervention group rated the subcategory teamwork and collaboration via RIPLS significantly higher (p = 0.02) after conducted course than before the course. This difference was not seen among the control group students who experienced stress significantly higher (p = 0.03) compared to the intervention group.

**Implications:** CASS methodology seems to support the students’ reflection, impact on their experiences of on-going activities, interprofessional collaboration and also to decrease their experience of stress during clinical practice. CASS develops students’ ability to reflect on ongoing clinical practice, on why activities are performed and needed as well as on the importance of interprofessional collaboration within health care.

2I-4. International Collaboration - Introduction of the HealthFusion team challenge to Scotland

**Oral Presentation**

• Jenny Miller, NHS Education for Scotland, Dundee, Scotland, UK
• Sundari Joseph, Robert Gordon University, Aberdeen, Scotland, UK
• Nichola McLarnon, Glasgow Caledonian University, Glasgow, Scotland, UK
• Monica Moran, Central Queensland University, Rockhampton, Queensland, Australia

Submitted abstract:

**Background:** Interprofessional Education is defined as; “occasions when two or more professionals learn from and about each other with the sole aim of improving collaboration and quality of care” (CAIPE, 2002). It has been implemented globally across health and social care education in an attempt to
establish safe, effective and collaborative team working and a flexible and adaptive workforce (World Health Organisation (WHO) 2010, 2011, 2013). However barriers remain to delivering this within educational establishments as well as within practice

**Objectives:** To introduce the HealthFusion team challenge to Scotland

**Method:** An innovative approach, founded in British Columbia, and further developed across Canada and Australia, provides a ‘Team Challenge’ to promote IPE within ‘real life’ practice. The interprofessional teams are provided with a case scenario with the aim of them working across professions, sectors and with those who use their services to provide a collaborative person centred management plan. The teams present their plans to an audience and expert panel and are judged on quality and collaboration. This simple but very effective activity has motivated students since the 1990s and is backed by research that highlights the ability to translate core values and competencies into interprofessional practice with the ultimate aim of improving the quality of services provided (Boyce et al, 2009) Following the All Together Better Health Conference VI Scotland inspired by a live challenge developed a partnership with the HealthFusion team in Australia, who have an expertise based on years of running these events. A Scottish Health and Social Care Team challenge will be run in March 2014.

**Results:** Evaluations from the Scottish experience will be compared with those from Australia.

**Implications:** Comparisons will enable further generalisation of the approach but also support any local considerations to be highlighted as and when other international colleagues utilise this IPE approach.

**References**


2] **Authentic engagement of student stakeholders in interprofessional education initiatives**

**Panel presentation**

**Program abstract:** Panel will feature presentations of faculty and student perspectives on student engagement within interprofessional initiatives, followed by sharing and discussion of perspectives and experiences among participants which will be captured and later distributed to participants.

- **Tara Hatch**, University of Alberta, Edmonton, AB, Canada
Objectives:

Submitted abstract:

**Background:** The National Survey of Student Engagement identifies institutional processes for student support, representation and agency with the expectation that attention to these factors will result in greater student engagement in learning and overall academic success. However, balancing the benefits of these processes with limited time and resources can be daunting.

**Objectives:** To promote thought and discussion among participants regarding this tension, we will examine the process and impact of student engagement within interprofessional (IP) initiatives at our university from four perspectives.

**Methods:** Addressing the needs of diverse learners to ensure students engage in IP education can be a significant challenge for educators, particularly when delivering IP education to large cohorts. Efforts to address this challenge were initiated four years ago by educators delivering a mandatory, multi-section IPE course, taken simultaneously by over 1000 students. Development of content/context specific streams was undertaken to increase student engagement by offering choice. Since the launch of the streams, two student groups presented additional ideas for streams. Students were interested in the opportunity to focus on an aspect of health care of their interest (Immigrant and Refugee, and Community Health) while building skills in leadership and teaching. One of these students was then enrolled in an elective IPE course in which the stream curriculum development was integrated as project-based coursework.

**Presenters:** M. Chow, M. Wong, and E. Chiu will present student perspectives related to:
- Motivation for developing a student-led IPE initiative.
- Evolving team process; resolution of challenges; reflection on findings and unanticipated outcomes.
- Recommendations for future student engagement in design and delivery of IPE curricula.

**Presenter:** J. Davies will present analysis based on comparison of outcomes for the two student-led streams and traditional course sections, including:
- Data on student satisfaction, which was gathered via online and written surveys.
- Feedback from section facilitators, provided via surveys and small group discussions.
- Collaboration of course coordinators and stream leadership teams on the evaluation, including observation of classes.

**Presenter:** T. Hatch will present on the process for adapting an elective course to support the student-led curriculum design team as well as a student-run clinic:
- Discussion of purpose of and process for adapting the elective course
- Description of course activities
• Presenter: S. King will outline an institutional approach for student engagement in the areas of research, governance and student awards.

Results: Following each presentation, time will be allotted to invite sharing and discussion of perspectives and experiences among participants. Discussion themes will be collated and shared with interested participants afterwards via a summarizing document.

Implications: Strategies will be identified from presentations and discussion that could be integrated at multiple levels of academic programs, specifically how to:
• facilitate self-discovery for individual students through development of authentic, active, collaborative learning for peers
• increase faculty-student interactions to create student leadership opportunities
• build supportive, collaborative campus environments
• enrich learning opportunities.

Author Biographies
Tara Hatch, is the Interprofessional Practice Manager with the Health Sciences Education and Research Commons. Tara coordinates an elective course in which individual students are matched to a clinical site to explore their team process. She contributes to the development and implementation of other interprofessional education projects at the University of Alberta. Prior to joining HSERC, she worked as a social worker in a variety of settings across the care continuum.

Dr. Sharla King is an Assistant Professor in the Department of Educational Psychology and Program Director for the MEd in Health Sciences Education program, Faculty of Education and the Director of the Health Sciences Education and Research Commons at the University of Alberta. Dr. King has worked in the area of interprofessional education for the past 10 years. Her research interests relate to interprofessional education and student team interactions, blended learning and simulation education.

Dr. JoAnne Davies is the Interprofessional Education Manager with the Health Sciences Education and Research Commons at the University of Alberta. Her role involves collaborating with health science faculties and practice organizations to develop and coordinate interprofessional educational opportunities, including an interprofessional health team development course taken by over 1000 students annually. Dr. Davies has a background in educational psychology and e-learning and has managed educational programs at the university for over 15 years.

2K. The devil is in the details: Using technology to filter and aggregate key patient information into a dynamic, clinical dashboard

Panel Presentation

Program abstract: We developed a real-time “dashboard” to facilitate interprofessional care. Embedded in a widely-used electronic medical record, it extracts and displays information from a variety of sources on risk factors that are common but modifiable. By also illustrating trends, linking to the original documentation, and providing recommendations, it promotes risk mitigation.

• Neil M. Resnick, University of Pittsburgh / UPMC, Pittsburgh, PA, USA
• Risa Kosko, Magee Women’s Hospital of UPMC, Pittsburgh, PA, USA
• Jill Young-Hague, Magee Women’s Hospital of UPMC, Pittsburgh, PA, USA
• Anne Kisak, UPMC, Benedum Geriatrics at Magee-Womens Hospital, Pittsburgh, PA, USA
• Vivek Reddy, Magee Women’s Hospital of UPMC, Pittsburgh, PA, USA
Submitted abstract:
Especially in acute care, providers are increasingly challenged to stay abreast of the huge amount of data on their elderly patients. The problem is compounded by the host of data sources, frequency of updates, and complexity of the electronic medical record (EMR). To address this issue, we created a clinical dashboard that aggregates common, modifiable, high risk factors and displays them on a single page and in real-time.

UPMC’s Divisions of Geriatrics and Information Services collaborated to identify the key data that are already being entered by nursing, nurse aides, PT, pharmacy, and nutrition. Although such data are available, they are located in disparate locations, often buried in lengthy documentation, and do not relate to each other. Compiling and aggregating this information without the dashboard requires considerable effort and knowledge of their importance and EMR location. In contrast, the dashboard aggregates information for a risk factor such as undernutrition within a single cell that includes information on albumin, pre-albumin, the malnutrition risk score on admission, and the proportion of meals eaten. Moreover, when the mouse is hovered over the cell, the dashboard also displays the trend for each parameter and a direct link to the source of the documentation. The dashboard can also be filtered and sorted by items, allowing construction of a dynamic worklist of patients based on their risk for adverse events. This creates a new paradigm for organizing clinical effort based on the individual needs of the patient. The dashboard can also prompt consideration of interventions—based on criteria that can be dynamically adjusted—and facilitate monitoring of their impact.

For providers, the dashboard creates a virtual 24/7 multidisciplinary team that promotes focus on mitigating risk. For hospital managers, dashboard identifies high risk patients which can facilitate optimal staff deployment. For hospital administrators, it provides data entered directly by frontline caregivers which permits trending of key aspects of patient care and risk reduction efforts over time. We are developing evaluation models for each of these goals.

In a 24/7 environment, focusing on modifiable high risk factors can be easily frustrated by information overload across an extensive EMR. Our electronic dashboard provides instant access to pertinent information from various disciplines, consolidated into a dynamic page that gives providers, staff, managers and administrators the critical and actionable information they need in a succinct, real-time, and user-friendly format.

Author Biographies
Dr. Resnick is the Thomas Detre Professor and Chief of Geriatrics at UPMC and University of Pittsburgh. Prior to this, he established the Division of Gerontology at Harvard’s Brigham and Women’s Hospital, launched the country’s first Continence Center, and conducted NIH-funded research on geriatric syndromes. He and his colleagues are now working to re-engineer geriatric care, both to improve it and to incorporate this improvement into routine care so that it will be delivered automatically.

Dr. Reddy is the Chief Medical Information Officer, Physician and Hospital Services. His role extends across all the UPMC facilities and involves providing direction to improve and optimize the electronic medical records to improve quality of care and outcomes. He is an active participant in regional and national discussions regarding the direction of health information technology and has collaborated with other organizations to work on adoption and optimization strategies.
Jill E. Young-Hague graduated from the University of Pittsburgh with a BSN and received her MSN in Nursing Leadership from Carlow University. She has held a variety of nursing and leadership positions at Magee Womens Hospital of UPMC since 1985. Jill is currently the Medical Surgical Patient Care Services Director responsible for several inpatient units as well as various patient care initiatives.

Risa Kosko RN MSN is the Unit Director on a medical surgical step-down unit at Magee Womens Hospital. Her past job experience includes 30+ years of bedside nursing and clinical management positions and work with the Donald D. Wolff Jr. Center for Quality, Safety, and Innovation at UPMC Team to roll out initiatives such as a Patient Care Technician Care Model that bases work on reliable versus variable tasks and delirium education for frontline staff.

Julie Nowak is a staff pharmacist at Magee Women's hospital who is active in many aspects of pharmacy services ranging from clinical pharmacy services, pharmacy operation, and student and resident education.

2M-1. Developing an organizational interprofessional care framework: critical elements from the literature, leaders and clinicians

Oral Presentation

- Maria Tassone, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada
- Lynne Sinclair, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada

Submitted abstract:
Background: Despite the development of robust IPE frameworks over the past decade, less emphasis has been placed on interprofessional care (IPC). This presentation aims to share best practices that guided the development of an IPC framework in a large, urban, multi-site hospital. The framework is intended to support organizations, clinical programs and professions to achieve improved health outcomes for patients across the continuum.

Objectives:
1. Describe the key findings of a literature review and environmental scan on IPC frameworks;
2. Discuss key strategies for engagement of stakeholders;
3. Explore elements of a successful IPC framework in health care as recommended by leaders and clinicians at the point-of-care.

Methods: The IPC framework environmental scan consisted of two components: (1) a literature review of published and grey literature; and (2) twelve interviews with key informants who were leading IPC in their organizations. Interviews/focus groups were conducted with 50 senior clinical leaders and four point-of-care exemplary clinical teams to learn about elements and future needs for best IPC.

Results: There is a dearth of empirical literature on IPC frameworks and much confusion regarding terms such as model of care and patient care model. Findings from both leaders and clinicians point to the fact that while organizations are experimenting with IPC frameworks, few have been tested. A definition and key elements of an IPC framework was thus developed. A two-tiered strategy including specific factors for both the organization and the clinical teams will be outlined.
Implications: Few best practices to guide the development of an IPC framework in the practice setting exist. The definition and key elements of an IPC framework surfaced through this project provide a critical overview and opportunity to engage stakeholders at all levels to enable the best models of care for patients.

Author Biographies
Maria Tassone is the inaugural Director of the Centre for Interprofessional Education, University of Toronto (UofT), and the Senior Director, Interprofessional Education and Practice at the University Health Network. She is an Assistant Professor in the Department of Physical Therapy, Faculty of Medicine, UofT. Maria’s leadership roles and scholarly work in education and health care have focused on the integration of practice, education and research, as well as leading change in complex systems.

Lynne Sinclair is an Educational Consultant and also the Innovative Program and External Development Lead at the Centre for Interprofessional Education, University of Toronto (U of T). She is an Assistant Professor and served as the Associate Chair of the Department of Physical Therapy, Faculty of Medicine at U of T. Lynne is widely invited as a keynote speaker and she has taught all over Canada, the USA, Australia and Saudi Arabia.

2M-2. Partnering to Transform the Patient Experience
Oral Presentation

Cynthia Phillips, Kingston General Hospital, Kingston, ON, Canada

Submitted abstract:
Background: “Transforming the patient experience through a relentless focus on quality, safety and service” and “Bringing to life new models of interprofessional care and education” are two of Kingston General Hospital’s 2015 strategies for achieving Outstanding Care, Always. The development and implementation of the Interprofessional Collaborative Practice Model (ICPM) has proved a fundamental change in support of both strategies. The model is intended to improve the quality of patient care and work life for Kingston General Hospital staff, physicians, volunteers & learners.

Objectives: To design, implement and evaluate a safe, quality, cost effective, patient- and family-centred model of care delivery.

Methods: Patient, provider and system indicators are being used to determine the impact of ICPM. Four inpatient care units have been evaluated pre-implementation and at 3, 10, 16 & 30 months post-ICPM.

Results: To-date findings include patient satisfaction with the management of the discharge process as well as positive perception that staff is responsive to their needs and requests. Provider survey responses from 3 of 4 units reveal positive improvement in job satisfaction and all 4 units demonstrate improvements in collaborative practice. Length of stay and hospital acquired infections have decreased on 3 of 4 units in the post phases.

Conclusions: Interprofessional collaboration and patient engagement has been vital in optimizing care. Implementation of ICPM is ongoing and a key addition has been the creation of a Patient & Family Advisory Council. So too is the continuous monitoring of its influence that will serve to sustain and provide opportunity to enhance its benefits to patients and providers.
Author Biographies
Cynthia Phillips has been a registered respiratory therapist at the Kingston General Hospital since 1984 including roles as clinical educator and manager. In her current role, Cynthia has managed the implementation of the Interprofessional Collaborative Practice Model of care and education and plays an ongoing role in evaluating and sustaining changes in practice. Cynthia graduated with a Bachelor of Arts in Health Studies in 2003 and a Master of Education from Queen’s University in 2007.

2M-3. Designing Interprofessional Space: Collaborative between Nursing, PT, and Architects

Oral Presentation

- Connie Crump, Indiana Wesleyan University, Marion, IN, USA
- Rob Dawson, Indiana Wesleyan University, Marion, IN, USA
- Barbara Ihrke, Indiana Wesleyan University, Marion, IN, USA
- Chris Purdy, SmithGroupJJR, Detroit, MI, USA

Submitted abstract:
Background: Too often, students in different healthcare fields are educated only to tolerate each other, not cooperate with each other. There is real value in teaching students to function together as true patient-centered care teams, to prepare them for a “collaboration ready” healthcare workforce. For this value to be fully realized, some basic foundational strategies must be put in place when designing facilities to educate these future health practitioners.

The design of a new building to accommodate multiple health professions at Indiana Wesleyan University (IWU) turned into an opportunity to incorporate interprofessional education and practices. As a private University without an academic health center, IWU requested architects to assist in designing a new health science initiative to design for maximum use and integrated educational occupancy. With a strong nursing program of over 2800 students in baccalaureate, masters programs, and a Doctor of Nursing Practice program IWU decided to expand its offerings of health sciences. The expanded offerings include a Doctor of Physical Therapy, Occupational Therapy Doctorate, Post-Professional Masters in Athletic Training and a Masters in Public Health. After multiple meetings, negotiations, cooperative planning, and some compromise the University is now awaiting the completion of its new $42 million building project to be completed in August, 2014.

Objectives:
1. Examine the process of programming interprofessional space during the design phases of a new Health Science and Nursing building.
2. Utilize architectural strategies that foster interprofessional education through the use of integrated technology, multi-disciplinary simulation space, collaborative gathering spaces and overall spatial organization that accommodates flexibility in learning pedagogies.
3. Identify best practices that offer an interprofessional education experience in an academic setting without the resources of an academic health center.
4. Learn how technology, pedagogy and space design facilitate the education of a “collaboration ready” healthcare workforce.
5. Consider the opportunities in designing for community-based clinical work and implementing interprofessional training strategies.
**Implications**: This panel discussion will describe the process of programming for the learning needs of multiple health professions, developing architectural solutions, and identifying best practices of interprofessional education in a setting without an academic health center. Designing future facilities to help encourage interprofessional education is a critical step in the advancement of health professions education and care delivery systems.

**Results**: Buildings are expected to support evolving technologies, create an atmosphere of wellness, and adapt to shifting pedagogical approaches. As interprofessional education expands, new types of labs and teaching environments are needed. The design process itself must also evolve to provide nursing and health science school administrators with the data they need to advocate for their programs and evaluate alternatives. The best health education buildings do not just contain their programs, but actively support a collaborative, flexible, technologically sophisticated and holistic pedagogy.

2M-4. The Electronic Health Record (EHR): Implications for Interprofessional Education and Practice

*Oral Presentation*

- Michelle Troeth, Elsevier Clinical Solutions, Grand Rapids, MI, USA
- Tracy Christopherson, Elsevier Clinical Solutions, Grand Rapids, MI, USA

**Submitted abstract:**

**Background**: As All Together Better leads the exploration on global issues around interprofessional education and practice, the impact on the electronic health record (EHR) cannot be ignored. The reality is that if not incorporated into our individual and collective efforts, the EHR can set us back due to the “hardwiring of fragmentation” that occurs as a result of EHRs that are implemented without intentional design to support principles of interprofessional education and practice.

**Objectives:**

1. Identify key driving factors of an electronic health record (EHR)
2. Identify the role of automation in creating integrated interprofessional care
3. Describe the technology-practice polarity impacting outcomes of an EHR implementation

**Methods**: Presenters will describe the major drivers of health information technology (HIT) and the electronic health record (EHR) to create clinical integration, population health management and patient engagement today. The polarity of technology and practice will be shared to highlight the frequent downside of technology the burdens interprofessional teams. Examples of an approach using intentionally designed automation that supports the principles of interprofessional practice and education will be shared including visual screen shots of interprofessional care and clinical documentation that has been accomplished in multiple EHR vendor platforms.

**Results**: Successful implementation of an intentionally designed systems-thinking approach embedded within the EHR is critical to achieve the desired outcomes of improved interprofessional care coordination and planning including improved patient outcomes and clinician satisfaction. The results of a large consortium of healthcare organizations committed to the design and implementation of an interprofessional framework while implementing the EHR will be shared.
Implications: Academic institutions committed to IPE and practice institutions committed to IPP will be at risk if creating simulated or actual technology applications that are not designed to support an interprofessional approach to care.

Author Biographies
Michelle Troseth, MSN, RN, DPNAP, FAAN is the Chief Professional Practice Officer for Elsevier Clinical Solutions. She has over 25 years of experience in co-designing and implementing evidence-based practice and technology infrastructures for patient-centered care and interprofessional integration across hundreds of healthcare settings. Michelle provides board leadership for organizations including The TIGER Initiative Foundation and the National Academies of Practice. She has authored several chapters/articles and speaks on professional practice, evidence-based practice, technology and cultural transformation.

Tracy Christopherson, MS, BAS, RRT is the Director of Interprofessional Education and Practice for Elsevier Clinical Solutions. She has been a leader in creating interprofessional practice environments for over 20 years. Her experience comes from coaching and mentoring numerous organizations across the United States and Canada in advancing interprofessional integration and implementing an integrated clinical practice framework to strengthen practice at the point-of-care. She is passionate about bridging the gap between interprofessional education and practice.

2R-1. The development of work-based assessment (WBA) of teamwork instruments – an interprofessional approach

Oral Presentation
- Jill Thistlethwaite, University of Technology Sydney, Sydney, NSW, Australia
- Robyn Dickie, University of Queensland, Brisbane, Queensland, Australia
- Kathy Dallest, University of Queensland, Brisbane, Queensland, Australia
- Diann Eley, University of Queensland, Brisbane, Queensland, Australia

Submitted abstract:

Background: This project addresses the need to develop a robust package of WBA tools for health professional students in clinical settings to test their performance and readiness for practice. It is funded by the Office of Learning and Teaching (OLT) in Australia. Health professional students are expected to achieve competencies in teamwork yet are rarely observed and assessed in teamwork activities in clinical settings. Existing tools identified in previous reviews are mainly for the evaluation of team performance rather than individual performance within a team. To align defined learning outcomes with assessment, there is a need for a framework and set of valid, reliable and feasible WBA tools with resources to support learning. This tool may be used across and between professions to help develop and ascertain the observed performance of health professional students in terms of teamwork and collaborative practice.

Objectives: To develop a framework for the WBA of teamwork, including the development and piloting of a tool to explore the application of the framework in a variety of circumstances. This WBA tool is intended for formative assessment, with an educational impact arising from its usefulness as a means of giving timely and constructive feedback.
Methods: A Delphi process was used to develop the prototype tool, followed by piloting at different sites and by different universities in Australia, Canada and the United Kingdom. Statistical analysis of the pilot data using generalizability theory and factor analysis was undertaken. Evaluation of the acceptability and feasibility of the tool was conducted via interviews and surveys.

Results: The Delphi process resulted in an 18-item tool – the iSTAT (individual student teamwork assessment tool). Piloting is ongoing and we will present results of the factor analysis and survey data.

Implications: The iSTAT has the potential to be an acceptable assessment tool in a wide variety of settings.

Author Biographies
Professor Jill Thistlethwaite is project lead and an experienced interprofessional educator. She is a practising GP and has been involved in health professional education for more than 20 years. Her most recent book was on ‘Values-based interprofessional collaborative practice’ and she is a founder member of AIPPPEN (the Australasian Interprofessional Practice and Education Network).

2R-2. Interprofessional clinical education program with complex community dwelling patients

Oral Presentation

- Laura Hanyok, Johns Hopkins University, School of Medicine, Baltimore, MD, USA
- Andrea Parsons Schram, Johns Hopkins University, School of Nursing, Baltimore, MD, USA
- Benita Walton-Moss, Johns Hopkins University, School of Nursing, Baltimore, MD, USA

Submitted abstract:

Background: Future health care providers will be required to work in high-functioning interprofessional teams. As educators, we must develop innovative methods to teach real-world clinical practice in a cost-effective, productive, and high quality manner. To meet these aims, we developed a HRSA funded longitudinal educational project to integrate interprofessional education (IPE) and clinical technology into the delivery of care of medically complex home bound elders.

Objectives: This longitudinal program creates interprofessional teams of students/trainees to learn team-based interprofessional skills in the context of providing care to the vulnerable homebound elder. Unique aspects of this project include the use of simulation technologies; development of a student/trainee led home visit model; and facilitated reflection and debrief methods.

Methods: Pharmacy students, graduate nurse practitioner students, internal medicine residents, and chaplain trainees participate in a longitudinal experience consisting of four online learning modules, an intensive half-day of team-building exercises, a standardized patient clinical simulation, and 3 student-led home visits, followed by facilitated debrief by interprofessional faculty or self-debriefing. Reflection on the experience is encouraged using journaling and team assessment following each home visit. Technology is a key learning tool, including online learning, clinical simulations, and iPads with pertinent information and apps.

Results: Program implementation began in Fall 2013. The program’s effect on learner IPE attitudes and beliefs will be assessed with pre-post learner surveys, using the Modified Readiness for Interprofessional Learning Scale (RIPLS) and the Interprofessional Socialization and Valuing Scale (ISVS). We will
qualitatively analyze the learner journaling reflections to identify themes. Preliminary data will be available in spring 2014. Challenges in implementing this project will be discussed.

Implications: Developing and implementing a longitudinal interprofessional education program focused on integrating technology with home based care is feasible. Data on the effects on learners will be presented and implications will be discussed.

Author Biographies
Laura A Hanyok, MD is an Assistant Professor of Medicine at the Johns Hopkins University School of Medicine and holds a joint appointment in Community-Public Health at the Johns Hopkins University School of Medicine. Dr. Hanyok practices general internal medicine at Johns Hopkins Bayview Medical Center.

Andrea Parsons Schram, DNP, FNP-BC is an Assistant Professor at the Johns Hopkins University School of Nursing and coordinator of the Family Nurse Practitioner Program. Dr. Schram works as a nurse practitioner in the Internal Medicine Department at the Johns Hopkins Outpatient Center. Benita Walton-Moss, PhD, FNP-BC is an Associate Professor at the Johns Hopkins University School of Nursing and Director of the Master’s Program. Dr. Walton-Moss works as a nurse practitioner at the Wald Community Nursing Clinic.

2R-3. Use of Problem Based Learning (PBL) in enhancing the morality of Inter-professional Education (IPE) & collaboration (IPC) in training Health care personal in South Africa: professional statutory
Oral Presentation

• Ushotanefe Useh, North West University, Mafikeng Campus, Mmabatho, North West, South Africa

Submitted abstract:
Background: The training of different health professions are regulated and controlled by different statutory guidelines. These guidelines serve as barriers to IPE and IPC. The development of a common ground is required for healthcare professions to effectively learn and later work together. According to WHO (2000), IPE is essential to the development of a “collaborative practice ready” health work force, one in which staff work together to provide comprehensive services in a wide range of health care setting.

PBL creates a learning environment which is more stimulating & humane, promotes interaction between students and faculty and interdepartmental collaboration (Norman & Schmidt, 1992; Mennin & Martinez 1986).

Objectives: This paper attempts to review statutory requirements for the registration of physiotherapy, pharmacy, medical, nursing and psychology students in South Africa

Methods: This study used qualitative content analysis of the different registration guidelines of the different professions.

Results: There were no recognised common grounds in the different professional registration documents reviewed. All the documents perpetuate unique professional identity and traditions.
Implications: The use of PBL with expected legal support from all health care disciplines through the integration of knowledge and mode of thinking in IPE and IPC will assist in the preparation of students for the real world, optimal utilization of available resources, effective communication and eventual benefit to the health care systems

Author Biographies
Director of Research and Postgraduate School, Faculty of Agriculture and Technology, North West University, Mafikeng Campus. Chairperson Health Ethics Sub-Committee, and a Fellow of the Higher Education Academy, United Kingdom. He belongs to different professional organisations; amongst them are Health Professions Council, United Kingdom, Health Professions Council of South Africa, the South Africa Association of Health Educationist, and South Africa Society of Physiotherapists.

2R-4. The relationship between transactive memory and group performance during an interprofessional healthcare team training exercise

Oral Presentation
- Marilyn Hanson, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- James Carlson, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

Submitted abstract:
Background: Collaborative healthcare education and practice is becoming an increasingly influential model for healthcare delivery. However more work needs to be done to utilize theoretical frameworks of collaborative behavior as well as to devise empirical evaluations of teamwork principles and measurement. In this session we discuss four distinct studies: early team formation in pre-clinical health professions students; transactive memory in healthcare teams; team skills as predictors of clinical outcomes; and collaborative competencies among students in eight professions participating in geriatric standardized patient simulations.

Objectives: Panelists will outline the process of development of team formation and what comprises successful components in the formation of teams, what constitutes teamwork in interprofessional settings, and how the relationship between these and actual healthcare outcomes can be demonstrated.

Methods: We will discuss the relationship between attitudes, teamwork skills and processes, and quality of care and patient outcomes, and will share measures of group teamwork skills and individual collaborative competencies. We will explore the reliability of instruments involved in measurement. One panelist will discuss results from a study utilizing Transactive Memory System theory, which explores the value of team interdependence when accomplishing group work. The purpose of this study was to explore the relationship between transactive memory development and the quality of care delivered during an interprofessional training exercise. Another panelist will discuss a study using qualitative methods to learn how students form teams when interviewing, examining and planning next steps with a standardized patient in a patient-centered medical home. A third panelist will discuss a study examining the relationship between interprofessional teamwork skills, attitudes and clinical outcomes in a simulated healthcare setting. A fourth panelist will discuss a study of collaborative competencies and measurement issues in an interprofessional geriatric simulation.

Results: Empirical findings included the following: 1) Peer support contributed to early team formation, and patterns of successful communication were established early. 2) Significant correlations were found
between team transactive memory and quality of care. 3) Teamwork skills, but not attitudes, were a predictor of improved clinical outcomes in a simulated setting. 4) Measurement of collaborative competencies was found to be superior (higher inter-rater reliability) when using standardized patients as evaluators rather than outside observers, and trends and differences between professions were observed in collaborative care competencies.

**Implications:** These studies provide insights into the processes through which healthcare students and professionals learn to be part of an interprofessional team within the contexts of a simulated patient encounter, and demonstrate both potential and actual clinical outcomes associated with team functioning in a simulated healthcare setting.

**Author Biographies**

David N. Dickter, PhD is Director, Interprofessional Education Research and Strategic Assessment at Western University of Health Sciences. He leads the development and implementation of assessment programs to evaluate IPE programming, including the design of assessment tools and systems. Prior to WesternU, he spent over 20 years developing and validating psychometric assessments for use in education and the workplace. He earned his Ph.D. in industrial/organizational psychology from Ohio State University.

Susan Tappert, DPT, is Director, Interprofessional Institute and Chair, Interprofessional Healthcare Studies at Rosalind Franklin University of Medicine and Science. Dr. Tappert has been involved with interprofessional education since 2004 and has over 25 years of experience in physical therapy education and over 10 years teaching in interprofessional courses. As the Director of the Institute, Dr. Tappert leads the university in the development, establishment and evaluation of innovative interprofessional education, research, community service and practice.

Sarah Shrader, PharmD, BCPS, CDE is Clinical Associate Professor and Director of Interprofessional Education at the University of Kansas. She graduated from University of Kansas School of Pharmacy and completed two years of residency training at the Medical University of South Carolina. She was a faculty member at the Medical University of South Carolina from 2006-2012. In 2006 she joined the faculty at the University of Kansas School of Pharmacy.

Andrea Pfeifle, EdD, PT, is Director, Center for Interprofessional HealthCare Education, Research and Practice at the University of Kentucky. Dr. Pfeifle works alongside the colleges of Communications, Dentistry, Health Sciences, Law, Nursing, Pharmacy, Public Health, and Social Work to promote teamwork and excellence in patient and community centered care through interprofessional education, research, and practice. A licensed Physical Therapist, she has practiced clinically and administrated physical therapy and rehabilitation departments in a variety of settings.
2S-1. Enhancing Teamwork through Implementing Interprofessional Care Processes in Acute Care

Oral Presentation

- Jana Lait, Workforce Research and Evaluation, Alberta Health Services, Calgary, AB, Canada
- Esther Suter, Workforce Research and Evaluation, Alberta Health Services, Calgary, AB, Canada
- Sharla King, University of Alberta, Health Sciences Education and Research Commons, Edmonton, AB, Canada

Submitted abstract:

Background: Evidence is growing that collaborative practice positively affects staff recruitment and retention and contributes to improved patient outcomes. Structured interprofessional care processes are designed to enhance communication and collaboration between providers from across disciplines when delivering patient care.

Objectives: We are developing and delivering education modules and providing implementation support for interprofessional care processes to enhance communication, care planning and decision making among providers and patients. The objectives are to improve the quality of the work environment, ultimately leading to increased provider satisfaction and retention, as well as higher quality of care and better care coordination for patients.

Methods: We are developing an experiential learning program, which includes simulation, for health care providers to learn and practice three care processes: interprofessional rapid rounds, interprofessional team assessment, and nursing assignment of care. The learning program and care processes will be implemented at two hospital units in Alberta. Project facilitators will work with healthcare providers at the two units to implement the care processes. The facilitators will identify provider learning needs and highlight areas where adaptations need to be made to support local context. The impact of the learning program and the care processes on providers, patients and the health care system will be evaluated. Evaluation will involve providers at four units (two implementation units and two control units) completing questionnaires and participating in interviews at two time points. Other data will come from patient surveys, administrative data, and observations.

Results: To determine the effect of the implementation of the interprofessional care processes, we will analyze changes on patient outcomes like adverse event and readmission rates, patient satisfaction, and provider perceptions on working collaboratively.

Implications: Designing education experiences that are experiential to accompany implementation of interprofessional care processes holds promise to ensure sustainable changes to enhance collaborative practice.

2S-2. Lessons from the Front Line: Advanced Practice Provider Residencies as the Nexus between Interprofessional Education and Practice

Oral Presentation

- Ben Reynolds, UPMC Physician Services Division, Pittsburgh, PA, USA
- Rebecca Wiegand, UPMC, Pittsburgh, PA, USA
- Amy Haller, UPMC, Pittsburgh, PA, USA
- Amanda Lombardi, UPMC, Pittsburgh, PA, USA
Submitted abstract:

Background: UPMC health system employs over 1,000 advanced practice providers (APPS), including nurse practitioners and physician assistants, across its extensive system of healthcare facilities. Due to the variability in skills, roles, responsibilities and relationships that the APPs require in different settings, full integration into practice is often challenging for both the APPs and their interprofessional colleagues. To improve this integration, UPMC has developed a series of novel APP residency programs including critical care medicine, general surgery, hospital medicine and ob/gyn. These programs provide – postgraduate training for the development of clinical skills as well as healthcare business acumen including such skills as interprofessional communication, value-based purchasing, patient satisfaction and managing length of stay. Concurrently, physicians undergo team-based care acculturation training to improve acceptance and understanding of the APPs’ role on the interprofessional team. These programs have graduated 3 residents and have 15 current enrollees.

Objectives: The objectives of this session are: 1) To familiarize attendees with gaps in knowledge that graduating APPs and interprofessional teams have for the purpose of improving the integration of new providers into practice, 2) To present UPMC’s curriculum and residency program design and how existing interprofessional practices have influenced the design, 3) To hear from residents and administrators about their experiences including implementation barriers and facilitators, and 4) To share early results of program evaluation efforts.

Methods: Existing data for the residency programs is primarily descriptive in nature with an ongoing evaluation effort. Program administrators will describe stakeholders, health system barriers and facilitators, and the role of the practice environment in curriculum development and implementation. A previous resident will describe his experience in the APP program and his transition into practice. The program evaluation team will present the program evaluation plan and early results of changes in professional skills and attitudes as well as quantitative evaluation of cost, quality and health outcome effects attributable to the residency program.

Implications: This program represents the nexus between interprofessional practice and education because these residencies have been informed by the knowledge and practice gaps necessary for APP integration into interprofessional practices. Sharing implementation experience with interested academic institutions and health systems will help to align thinking about these programs and advance dissemination of this concept.

Author Biographies

Ben Reynolds, PA-C is a physician assistant with the division of trauma and general surgery at UPMC Presbyterian. He is the director of the UPMC Office of Advanced Practice Providers, which oversees 1,400 advanced practice providers throughout the UPMC system. Additionally, Reynolds serves as a Clinical Assistant Professor of Surgery for the University of Pittsburgh Medical School, University of Pittsburgh School of Health and Rehabilitation Sciences, and Adjunct Assistant Professor of Physician Assistant studies for Chatham University. Reynolds served in the United States Navy prior to pursuing a career in the physician assistant field. He is a member of the Eastern Association for the Surgery of Trauma, Pennsylvania Society of Physician Assistants, American Academy of Physician Assistants, and American Association of Surgical Physician Assistants.

Mitch Kampmeyer, MPAS, PA-C is the program director and first graduate of the UPMC Critical Care Medicine Advanced Practice Provider (APP) Residency, the first APP residency in the UPMC Health System. He graduated from the University of Pittsburgh with his Master’s degree in 2011. Clinically, he
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Johanna Brown was an Oral Practitioners of Medicine. She was promoted to Director of UPMC Advanced Practice Provider Surgical Residency Program which she designed, recruited, and implemented with first 2 residents to graduate September 2014. Amy also sits on the Governing Council for the UPMC Advanced Practice Provider Clinical Ladder and is an avid teacher of Physician Assistant and Medical Students.

Amanda Lombardi, ACNP is the first nurse practitioner in the UPMC Critical Care Medicine Advanced Practice Provider (APP) Residency. She graduated in 2012 from the University of Pittsburgh with her Master of Science in Nursing and was previously employed as an RN at UPMC Presbyterian’s Trauma Surgical Intensive Care unit.

Johanna Steenrod, MS, CFA is a Graduate Student Researcher at the University of Pittsburgh’s Health Policy Institute. She is pursuing a PhD in Health Services Research and Policy. Her research interests include healthcare workforce innovations, interprofessional teams, and organizational and systems theory. Previously, Johanna worked as a consultant in the Healthcare Industry Group at Alvarez and Marsal. She consulted many engagements, involving qualitative and quantitative analysis to achieve acquisitions, restructurings, and strategic realignments.

2S-3. Navigating Identity in Interprofessional Contexts: Exploring the Pathways of Students and Practitioners in Social Work, Occupational Therapy, Nursing and Medicine

Oral Presentation

- Marion Brown, Dalhousie University, Halifax, NS, Canada
- Paula Hutchinson, Dalhousie University, Halifax, NS, Canada
- Heidi Lauckner, Dalhousie University, Halifax, NS, Canada

Submitted abstract:

Background: Despite gains in the acceptance of interprofessional (IP) education as a focus in health professions’ curricula, there remains resistance to its full inclusion, suggesting that uniform enthusiasm for IP collaboration may be an assumption. Our research queries both the assumptions about uniform enthusiasm and the layers of resistance, specifically exploring them in relation to how professional identity evolves in interprofessional work contexts.

Objectives: This study sought to understand the processes by which students, practitioners, and educators develop a sense of their unique professional identity within increasingly interprofessional contexts.

Methods: Interviews were conducted with a total of 60 students, practitioners, and educators from the professions of nursing, social work, occupational therapy and medicine. Constructivist grounded theory guided data analysis.
Results and Implications: Preliminary data analysis indicates that health professionals engage in a pathway towards shaping their professional identities that involves an interplay among: 1) personal qualities and experiences, 2) the development of uniprofessional expertise, 3) acknowledgement that all professions play a part in interprofessional client-centred collaboration, and 4) recognition that we are a part of, and need to address, larger issues that may require transcending traditional professional role delineation. A central influence on how students and practitioners move along this pathway is the practice context. With a deeper understanding of how health professionals develop an integrated identity within a climate that increasingly emphasizes interprofessional collaboration, students and practitioners can identify strategies to successfully shape their identities amidst blurred disciplinary and professional lines.

2S-4. Interprofessional Education Integration in a Physician Assistant Studies Program

Oral Presentation

- David Howell, Medical University of South Carolina, College of Health Professions, Charleston, SC, USA
- Amy Blue, University of Florida, Gainesville, FL, USA

Submitted abstract:

Objectives:
1. Discuss how a Physician Assistant (PA) curriculum can integrate with a university’s interprofessional (IP) education goals.
2. Identify potential IPE activities to design and develop at other institutions.
3. Recognize how to supplement existing curricula with IPE activities.

Background: The Medical University of South Carolina’s interprofessional (IP) education plan comprises four learning goals in which students 1) acquire teamwork competencies; 2) acquire knowledge about other health professions; 3) apply IP teamwork competencies in learning settings; and 4) demonstrate these competencies in practice contexts. The PA students engage in multiple activities to acquire, apply and demonstrate their IP knowledge and skills within the context of the university’s IP education plan.

Methods: The PA students acquire teamwork competencies through interactive case discussion around a team survival exercise. Following this, they participate in the university’s first-year student Interprofessional Day to acquire knowledge about the professions educated at MUSC. During the RISE (Rural Interprofessional Student Experience) course, students observe and learn more about other health professions in rural hospital settings. To apply their IP team skills, students participate in the university’s required IP course, an “IP Caregivers” activity in community, and a high-fidelity healthcare simulation experience. To demonstrate their IP skills during clinical rotations, they engage in intentional interactions with other professions to improve a patient’s care and document these.

Results: Multiple evaluation methods, including qualitative and quantitative approaches, are used to assess students’ learning and their experiences throughout the various activities. Results suggest students acquire skills and value their interprofessional learning.

Conclusions: The institutions’ learning goals provide multiple, increasingly sophisticated opportunities for PA students to acquire interprofessional teamwork competencies. This learning approach can serve as a model for other PA programs engaged in IP education.
Plenary session: Advancing Interprofessionalism in the United States

As healthcare systems in the United States grapple with a rapidly changing healthcare environment, leaders explore new models of care to improve quality and reduce costs. This panel will discuss how U.S. health systems are adopting interprofessional care models and creating feedback to modernize education and training programs.

- Steven D. Shapiro, MD, Chief Medical and Scientific Officer, UPMC Physician Services
- Barbara Brandt, PhD, Director of the National Center for Interprofessional Practice and Education
- Mark A. Warner, MD, Executive Dean of Education, Mayo Clinic

3A. Faculty Development: Facilitation Skills Training for IPE Faculty

Workshop

Program abstract: The Center for Health Sciences Interprofessional Education (CHSIE) at the University of Washington recognizes after 13 years of training health professions students that faculty need in-depth education about principles of interprofessional education (IPE) and specifically, facilitation skills training. This hands-on workshop is designed to help instructors: 1) identify and incorporate key competency areas for IP collaboration, 2) anticipate common challenges in facilitating IP learning groups, and 3) identify and practice effective facilitation strategies.

- Brenda Zierler, University of Washington, School of Nursing, Seattle, WA, USA
- Karen McDonough, University of Washington, Seattle, WA, USA
- Debra Liner, University of Washington, School of Nursing, Seattle, WA, USA
- Jennifer Danielson, University of Washington, School of Pharmacy, Seattle, WA, USA
- Jennifer Sonney, University of Washington, School of Nursing, Seattle, WA, USA
- Mayumi Willgerodt, University of Washington Bothell, Bothell, WA, USA

Submitted abstract:

Background: Educating and training interprofessional groups of students requires a unique set of skills and has been noted as a faculty development need. For example, understanding the specific IPE competencies that underly the learning goals as well as competency in facilitating groups of students from different professions are two identified challenges for educators. Both of these are critical to the success of IPE and commonly understood, yet rarely practiced. Drawing from our past experiences with IPE, the University of Washington’s Center for Health Sciences Interprofessional Education (CHSIE) partnered with the UW Center for Medical Education and the UW Board of Health Sciences Deans’ Subcommittee on IPE Curriculum and Metrics to host the first large-scale IP faculty development training session focused on these areas. We invite you to participate in this skill-building workshop.

Objectives:

1. Identify key competency areas for IP collaboration
2. Understand common facilitation challenges in IP learning groups
3. Identify and practice effective facilitation strategies

Methods: The 90 minute session will start with an introduction then will replicate parts of the faculty development training for IP competency and facilitation skills. The session will be broken down as follows:

- Introduction of Session and learning objectives (10 minutes)
- Small group skill-building breakouts with pre-recorded videos (60 minutes)
Short video clips featuring real health professions students enacting one or multiple IP small group facilitation challenges
- Groups will work together to identify the challenges in each video. Common challenges that will be portrayed in the video include:
  - Professions sitting in segregated groups
  - Students who are not engaged/speaking
  - Students dominating the discussion/conversation
  - Use of acronyms and jargon and the need for a common language
  - Negative or derogatory comments made toward a profession (stereotyping and biases)
    - Small groups will report out the issues they identified and link them to specific IP competencies.
    - Each small group will then discuss and practice how they would facilitate the group to avoid those identified issues.
  - Report Backs/Debrief from some/all groups (15 mins)
  - Wrap up and distribution of handouts that explicate tips for facilitating IP student groups

**Results:** Participants in this roundtable discussion will develop a more thorough understanding of the unique challenges of facilitating IP small groups and skills to overcome them as well as the need to train IP faculty facilitators at their institution. Implications of Proposed Session: IP faculty development is an important component of IPE. As a result of this session, participants (educators) will be able to be more effective in teaching IP students.

**Author Biographies**
Brenda Zierler, PhD, RN, FAAN leads two HRSA training grants - one focusing on faculty development in the use of technology and the second grant focusing on technology enhanced IPE for advanced practice students. She is Co-Director for the UW Center for Health Sciences Interprofessional Education, Practice and Research and Associate-Director of the UW Institute for Simulation and Interprofessional Studies (ISIS). Dr. Zierler is a Board Member of the American Interprofessional Health Collaborative.

Dr. Karen McDonough is an Associate Professor in General Internal Medicine and a hospital based internist at the University of Washington. She directs the 2nd year medical students year-long clinical skills course, and is integrating team skills and interprofessional training into the clinical skills curriculum. She is participating in the redesign of the School of Medicine curriculum, which will include a greater focus on interprofessional teaching and learning.

Jennifer Danielson PharmD, MBA has worked in pharmacy education since 1996 and became involved in IPE in 2010. Her years of practice as a certified diabetes educator grounded her in the importance of interdisciplinary practice. Through her work as an IPE teaching scholar, she gained the skills necessary to be a point person for her profession in IPE efforts at the University of Washington—a large academic health center with 6 health science schools.

Debra Liner, BA, PMP, is program manager for the University of Washington’s (UW) Center for Health Sciences Interprofessional Education, Research and Practice (CHSIERP). While at UW she has managed objectives for three multi-year training grants – one focusing on faculty development in the use of technology, second on training interprofessional undergraduate students, and third focusing on technology enhanced IPE for advanced practice students. Ms Liner also manages CHSIERP’s website featuring online lessons, faculty training toolkits and a technology blog.
Jennifer Sonney, MN, ARNP, PNP-BC is the director of the Pediatric Nurse Practitioner program at the University of Washington. In addition to clinical expertise, her area of scholarship includes integration of IPE opportunities for nurse practitioner students. She helped plan, co-write the case, and facilitate this stand-alone IPE event for advanced health profession students. Jennifer is also adjunct faculty with the Leadership Education in Adolescent Health, a HRSA-funded multidisciplinary training program for health professionals.

3B. Interprofessional Education Site Evaluation Tool: Assessing the readiness of a clinical site to provide interprofessional education

**Workshop**

**Program abstract:** The Interprofessional Education Site Evaluation Tool was developed for the purposes of providing a common understanding of what is needed by clinical sites to provide interprofessional education and of determining the extent to which a site meets the standards of an exemplary interprofessional learning environment. Attendees will learn about and gain practice with the tool.

- **Brian Sick**, University of Minnesota, Minneapolis, MN, USA
- **Janet Shanedling**, University of Minnesota, Minneapolis, MN, USA

**Submitted abstract:**

**Background:** Health professions students need to be educated in interprofessional sites which are properly and purposefully configured to ready them for future work in an interprofessional collaborative practice. There is not a common understanding of what is needed by clinical sites to provide interprofessional education nor are there tools to assess the readiness of a clinical site for this type of education. The Interprofessional Education Site Evaluation Tool was developed for the purposes of providing this common understanding and of determining the extent to which a site meets the standards of an exemplary interprofessional learning environment.

**Objectives:**

1. Understand the research and history leading to the development of the National Center for Interprofessional Practice and Education’s Interprofessional Education Site Evaluation Tool
2. Experience the real use of the tool as an individual and in a facilitated small group session
3. Critique and assess the Interprofessional Education Site Evaluation Tool as it might apply to multiple uses and users
4. Develop an understanding of the assessment tool and a preparedness to facilitate its use if appropriate in users’ own sites

**Methods:** First, the participants will be briefly oriented to the tool by its creators. Participants will then be divided into mock interprofessional clinical groups where they will use the tool as it would be implemented in a real clinical setting - they will complete the tool individually and then as a site via a facilitated discussion led by the presenters. The participants will learn how to introduce the tool to a site, how to help their own clinical sites understand the purpose and structure of the tool, and how to facilitate a summary discussion of the criteria at the site. Through a facilitated debriefing the participants will discuss the strengths, weaknesses, and uses of the tool with the goal of refining the tool and its utility.

**Results:** The participants will be trained in the use of the Interprofessional Education Site Evaluation Tool and in facilitating conversations with clinical sites in the use of the tool. They will become part of a network of facilitators of the Evaluation Tool who will be affiliated with the National Center for
Interprofessional Practice and Education. Participants will be encouraged to work with the National Center to continue to refine the tool and to begin an ongoing conversation among their own site personnel which relates to the needs of a site to better meet the criteria and standards of an exemplary interprofessional learning environment.

Implications: The Interprofessional Education Site Evaluation Tool will be introduced to a broad audience who will be trained to assess their sites, allowing a common understanding and evaluation across many environments of what it means to be an exemplary interprofessional education site.

Author Biographies
Brian Sick, MD is an assistant professor at the University of Minnesota where he is the Medical Director of the Primary Care Center. He is also the Medical Director of the Phillips Neighborhood Clinic, a free clinic run by an interprofessional group of students. Finally, he is the Team Leader for the Academic Health Center 1Health interprofessional education initiative and the creator of the Interprofessional Education Site Criteria Tool.

Janet Shanedling’s expertise is in the development of curriculum and instructional programs for health professions students and professionals, particularly programs that integrate e-learning and teaching processes. In her role as Director, AHC Educational Development, Janet directs a unit that collaborates with health professions faculty to develop eLearning, videographic, and simulation courseware and assessment tools. Janet also works with the National Center for Interprofessional Practice and education, serving as the Nexus Innovations Incubator Project Manager.

3C. Who am I? Who are you? Developing personal, professional and interprofessional identities through stories and storytelling

Workshop

Program abstract: This workshop highlights the importance of developing an interprofessional identity within IPE and how this can be supported through storytelling. Participants will have the opportunity to understand the importance of identity formation in the development of interprofessional practitioners, educators and students, and to appreciate the relationship between stories and identity.

- Richard Gray, CAIPE, UK
- Pip Hardy, Pilgrims Project Ltd, Cambridge, England, UK

Submitted abstract: 
Objectives: This workshop will illuminate the complex interplay between personal, professional and interprofessional identities. The workshop is particularly suitable for curriculum planners, teachers and those involved in inter-professional education but will also appeal to anyone interested in the development of inter-professional identity.

By the end of the workshop participants will be understand the importance of identity formation in the development of interprofessional practitioners, educators and students, and to appreciate the relationship between stories and identity.

Background: An inter-professional identity that is built upon firm foundations of personal and professional identities is essential for effective performance in inter-professional education and practice; it is also of fundamental importance to factors relating to both IPE curriculum and IPE pedagogy (Gray 2009).
Making effective transitions between different identities is integral to the development of a mature interprofessional. Identities do not exist as a simple linear continuum with loss and gain of identities occurring during each transition but neither do different identities just co-exist and develop at the same time. It is necessary to follow a developmental pathway with a clear direction and definite milestones, with all identities contributing to the final objective of achieving the attributes of a mature inter-professional (Gray, 2009).

It is further argued that stories are informed by – and inform – the storyteller’s identity; the effective use of storytelling can be used to develop identity, insight and development (Corry, 2008; Corry, Critchfield, & Pang, forthcoming; Hardy & Sumner, 2013; Morrison, 1993; Ochs & Capps, 1996; Stacey & Hardy, 2011)

**Content:** This interactive workshop will engage participants in an exploration of their own interprofessional identity and the identities of others. Stories from the Patient Voices collection made by junior doctors (www.patientvoices.org.uk/lssc.htm), newly-qualified nurses (www.patientvoices.org.uk/un.htm) and other, more experienced professionals, will be used to prompt small group work in which participants will have an opportunity to:

- understand the inter-professional identity pathway
- recognise the relationship between storytelling and identity
- explore the use of storytelling in inter-professional identity development.
- apply the principles of storytelling to their individual IP teaching, learning and practice.

**Method:** Following an introductory overview of an inter-professional identity model, participants will watch several digital stories from the Patient Voices collection before engaging in a series of small group activities. Participants will consider the relationships between identity and stories, the extent to which they inform one another and how far personal identity should overlap with professional identity. Participants will be invited to reflect on their own personal story and the development of their professional and interprofessional identities. Participants will reflect on the implications of what they have learned during the workshop and how they might put this into practice in their own inter-professional education or practice context, particularly with respect to the creation of appropriate space and opportunity to tell and share stories.

**References**


**Author Biographies**

Richard Gray was elected CAIPE Chair in 2013. He is past present President of the General Practice with Primary Health Care Section of the Royal Society of Medicine and has a background as a general practitioner in Brighton. He is an Honorary Faculty Fellow, University of Brighton. He previously was Principal Lecturer in Primary Care at the Brighton and Sussex Medical School and has a particular interest in the preparation and support of IPE teachers.

Pip Hardy is joint CEO of Pilgrim Projects and co-founder of the Patient Voices Programme [(www.patientvoices.org.uk)](http://www.patientvoices.org.uk). The Patient Voices Programme aims to gather and share effective, affective and reflective digital stories created by all stakeholders in health and social care to promote understanding and empathy and offer important inter-professional learning in the hope of contributing to care that is not only safe and of the highest quality, but is also characterised by compassion and humanity.

**3D. Working with Standardized Patients (SPs) in health education; everything you ever wanted to know but were afraid to ask!**

**Workshop**

**Program abstract:** Standardized/Simulated Patients (SPs) have been part of international health education since the 1960s. In this practical, interactive workshop, we draw on our diverse experiences in two different countries to introduce some key elements of SP methodology for those who are interested in working with SP’s but are not sure how to start. We will provide materials and information regarding recruitment of SPs, selection of learning objectives conducive to this type of activity, the basics of SP training and feedback delivery. Through discussion, a large group fishbowl demonstration featuring an SP simulation and small group conversation, we’ll explore appropriate contexts for this teaching method.

• **Valerie Fulmer**, University of Pittsburgh, Pittsburgh, PA, USA

• **Cathy Smith**, University of Toronto, Toronto, ON, Canada

**Submitted abstract:**

Many modalities of simulation have been used to design effective interprofessional learning sessions, including standardized /simulated patient methodology. Standardized/Simulated Patients (SPs) are professionals who have been trained to engage learners realistically in face-to-face encounters in order to teach or assess a wide variety of knowledge, skills and behaviour. SP methodology is an appropriate teaching strategy to consider especially when the learning objectives relate to interpersonal or professional skills or when technical and communication skills are being combined, as in hybrid simulation training. In addition, the SP is able to give behaviorally based, individualized feedback to the learner from the point of view of the given “role”, whether as a “patient”, a “client”, or other “learner”. SP methodology can also augment mannequin based simulation modalities and increase the educational versatility of any team based training environment. Sometimes, though, there are obstacles to implementing SP methodology related to economic considerations or to a lack of understanding about, or knowledge and skills of, how to work with SPs.

In this practical, interactive workshop, we draw on our diverse experiences in two different countries to introduce some key elements of SP methodology for those who are interested in working with SP’s but
are not sure how to start. We will provide materials and information regarding recruitment of SPs, selection of learning objectives conducive to this type of activity, the basics of SP training and feedback delivery. Through discussion, a large group fishbowl demonstration featuring an SP simulation and small group conversation, we’ll explore appropriate contexts for this teaching method. Challenges and solutions to effectively working with SPs and how SP methodology can be integrated with other types of modalities will also be discussed.

After participating in this workshop, attendees will be able to identify basic components of SP methodology; implement strategies to introduce SP methodology into their environment; and reflect on practical aspects of including SP methodology in their own institutions. We will also provide resources and references for further exploration and application of SP methodology.

**Hands-on Workshop Format- 90 minutes**
- 10 min Introduction, session learning objectives, participant learning objectives
- 15 min Theory Burst – brief history, overview of SP Methodology
- 25 min Fishbowl – SP performance/feedback/ key elements- case details/level of realism/teaching in role/ feedback- model different methods
- 25 min Brainstorming/focus group: how to get started. Recruiting/projects to use SPs in right now; development of basic learning objectives and encounter structure.
- 15 min Summary, key points, next steps, research, resources

**Author Biographies**

Cathy Smith, PhD is a Lecturer in the Department of Medicine and a member of the Wilson Centre for Research in Education, both at the University of Toronto. She also consultant for the Pharmacy Examining Board of Canada and facilitates interprofessional workshops at the Ontario Simulation Network. A long-time member of the Association of Standardized Patient Educators, she is the Chair for the annual conference. She is the recipient of the 2013 ASPE Outstanding Educator Award

Valerie Fulmer, BA is the director of the SP Program, University of Pittsburgh School of Medicine. She oversees all SP sessions; hires, trains, and oversees 135 SPs who serve learners in nursing, pharmacy, dental, physician assistants, residency and Veteran Affairs. Association of Standardized Patient Educators (ASPE) Editor-in-Chief of the ASPE journal, Valerie also chairs the Publications Committee and reviews conference submissions. She holds memberships in the Society for Simulation in Healthcare and the Ontario Simulation Network.


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3E-1. The delivery of interprofessional collaborative patient-centered care in community based mental health settings

*Oral Presentation*

- May Helfawi, University of Ontario Institute of Technology, Oshawa, ON, Canada
- Brenda Gamble, University of Ontario Institute of Technology, Oshawa, ON, Canada

Submitted abstract:

**Background:** Interprofessional Collaboration (IPC) “occurs when multiple health workers provide comprehensive services by working together...to deliver the highest quality of care across settings” (WHO, 2010). The Canadian Mental Health Association CMHA (2010) reported that one in five Canadians will have a mental illness at some point in their lives. However, there remain few data and limited guidance about how to implement interprofessional practice in the delivery of decision support to mental health patients (Campbell et al., 2011). This study explores approaches by which interprofessional practice can be used to support the delivery of patient-centered care at mental health settings.

**Objectives:** To explore the patient-centred experience, the patient’s overall contribution to their personalized care, and how the dynamic of patient involvement works with respect to IPC.

**Methods:** Data collection included contextual observations, a paper-based questionnaire, and interviews of healthcare and social services workers as well as patients, at a large Canadian Hospital in Oshawa, Ontario. Data analysis will be completed by January 2014.

**Results and Implications:** Patient involvement is limited by age, medical condition, and the context of the health care setting. There is severe shortage of social workers at the mental health unit, which potentially creates a negative patient experience for those transitioning into the community post discharge. This can also cause delays in patient discharge plans as well as increase patient wait times. There is a pressing need to include patients, social workers and geriatricians in the IP team to provide patients with complete and accurate assessments. This will consequently promote patient satisfaction and acceptance of treatment, thereby improving the effectiveness and efficiency of mental healthcare. Involving patients in IPC empowers them to continue taking accountability of their own mental health post discharge. This creates a continuum of care to the community thereby enabling patients to reach full recovery.

**Author Biographies**

May Helfawi, HBSc graduated from the University of Toronto with an Honours Bachelor of Science, currently pursuing a Masters in Health Studies at UOIT, and writing her thesis on “Patient involvement in IPC, a catalyst to the delivery of patient centred-care at community based mental health settings”. Her
goal is to document and analyze patient and professionals’ experiences, and support cultural practices which promote collaborative patient-centered care and improve health outcomes.

Brenda Gamble, MSc, PhD areas of research include interprofessional and intraprofessional practice/education, health human resources, accountability in healthcare, and the quality and safety of medical laboratory services.

**3E-2. Creating an Innovative, Sustainable Integrated Behavioral and Physical Program in a Residency Family Health Center**

*Oral Presentation*

- **Jonathan Han**, UPMC New Kensington Family Health Center, New Kensington, PA, USA
- **James Mercuri**, UPMC St. Margaret, Family Medicine Residency Program, Pittsburgh, PA, USA
- **Marianne Koenig**, UPMC St. Margaret, Family Medicine Residency Program, Pittsburgh, PA, USA
- **Patricia McGuire**, UPMC St. Margaret, Family Medicine Residency Program, Pittsburgh, PA, USA

**Submitted abstract:**

**Background:** One in four individuals in the United States suffers from a mental illness. Unfortunately, there are significant cultural, organizational and financial barriers patients must overcome to obtain effective treatment and experience recovery. Family physicians care for patients with behavioral health (BH) issues that profoundly affect their physical health. Integrated care models composed of behavioral health specialists, physicians and PharmD’s collaborating in a primary care setting have improved outcomes for patients and families. Our Integrated Behavioral Health Program started in 2012, and successfully met challenges including staff training, cultural change, financial reimbursement, and facilitating HIPAA-compliant electronic communication.

**Objectives:** To deliver collaborative behavioral health services in three academic Family Health Centers located in medically underserved communities of Pittsburgh.

**Methods:** This collaborative and integrated care model provides behavioral health services in residency Family Health Centers utilizing a team of behavioral health specialists (LCSW, LPC and psychiatrists), family physicians and PharmD’s. The integrated model utilizes evidence-based IMPACT (Improving Mood-Promoting Access to Collaborative Treatment) and SBIRT (Screening, Brief Intervention, Referral to Treatment) interventions. We screen all patients for depression and problem substance use, and refer identified individuals for on-site behavioral health management. The behavioral health team is also available to see patients on an open-access schedule for counseling, crisis management, medication review and reconciliation, healthy behavior support and stress reduction services. Our panel will discuss implementation, staff recruitment and training, culture change and workflow reengineering, electronic documentation and team communication, and reimbursement/financial sustainability.

**Results:** Our data demonstrates improved patient outcomes for depression and decreased emergency room utilization. Patient and provider satisfaction improved after implementation of the Integrated Program. Drawing upon advocacy efforts with insurance providers to improve reimbursement for behavioral health services, we have achieved financial sustainability for our Integrated BH Program.

**Implications:** As ACO’s become prominent with the Affordable Care Act, collaborative care models that can improve outcomes, cut costs and be replicated in many outpatient settings will be incentivized. In addition to improving behavioral health outcomes for our patients, we successfully integrated electronic
documentation in a shared medical record, streamlined interprofessional communication, improved patient and staff satisfaction, and demonstrated financial sustainability. Training, education, and culture change issues are challenges that we successfully met. Our integrated model continues to evolve as we target “super-utilizer” patients and also address substance abuse issues in a more holistic fashion. We updated the teaching curriculum to prepare residents to be successful leaders of collaborative care teams that not only target physical health needs, but also behavioral health conditions. We will share with conference participants valuable lessons learned along the way, in hopes that our Integrated BH Program will serve as a template for other residency programs and primary care offices interested in collaborative care.

Author Biographies
Jonathan Han, MD, is a family physician, Medical Director of UPMC New Kensington Family Health Center, and faculty member of UPMC St. Margaret Family Medicine Residency Program. Dr. Han received his MD from Feinberg / Northwestern University Medical School, and completed his residency at San Francisco General Hospital / UCSF Family Medicine Residency Program. Dr. Han’s interests are in the care of the medically underserved, and issues pertaining to health care and social justice.

Marianne Koenig, PharmD, BCPS, is a Clinical Pharmacy Specialist/ Faculty with UPMC St. Margaret Family Medicine Residency Program. She received her bachelor’s degree in pharmacy from Duquesne University along with completing an Academic and Research Fellowship; PharmD from the University of North Carolina; and is Board-Certified in Pharmacotherapy. Dr. Koenig provides patient care at the UPMC St. Margaret Family Health Centers and teaches pharmacy and medical residents during their outpatient rotations.

Jim Mercuri LCSW, is a Licensed Clinical Social Worker at UPMC St. Margaret. He received his bachelor’s degree at Lancaster Bible College. He received his Master’s in Social Work from University of Pittsburgh. Jim coordinates the implementation and quality of the behavioral health services at the Family Health Centers. He specializes in the treatment of mood disorders and behavioral problems within diverse populations.

3E.3. Promoting Interprofessional Knowledge Exchange in Geriatric Mental Health: Pairing a Videoconference Education Series with an On-line Community of Practice

Oral Presentation
- Lisa Sokoloff, Baycrest, Toronto, ON, Canada
- Cindy Grief, Baycrest, Toronto, ON, Canada
- Arpit Chhabra, Baycrest, Toronto, ON, Canada

Submitted abstract:
Background: Advances in technology have generated opportunities for knowledge exchange between health care professionals. In Canada, there is a shortage of experts in geriatric mental health. Geriatric psychiatrists number approximately 200, mostly concentrated in urban centres. A previous survey demonstrated interest among health care professionals for ongoing education sessions in geriatric mental health. Videoconferencing & webcasting technologies are a cost and time-efficient way to share knowledge and expertise. Accordingly, a monthly videoconferenced education series was developed and linked with an on-line community of practice (CoP). This CoP offers virtual space for continued connections between interprofessional care providers. It is a forum for ongoing exchange of information...
pre- and post- live videoconferenced sessions. It is intended to provide a framework for best practices and clinical case conferences.

**Objectives:**
1. To develop a national videoconferenced education series in geriatric mental health
2. To develop an interprofessional on-line community of practice linked with this videoconferenced series

**Methods:** Needs assessment surveys were developed and disseminated nationally to health professionals interested in geriatric mental health including underserved populations. Results were used to inform the format and content of the education sessions and creation of the CoP. A database was generated from national organizations, professional and administrative contacts. Our eHealth department partnered in developing the website.

**Results:**
- Monthly videoconferences average 15 sites per session across Canada
- Videoconferenced sessions have expanded to include simultaneous and archived webcasting
- On-line CoP launched October 2013 – GeMH.org

**Implications:** Development of an on-line CoP linked with live videoconferencing exemplifies the benefits of technology by:
- addressing gaps in service by promoting access to clinical expertise
- integrating interprofessional knowledge exchange between the videoconference education sessions and on-line discussions
- permitting international participation across time zones
- reducing time, cost and geographic barriers
- creating a repository of knowledge

**Author Biographies**
Lisa Sokoloff is Professional Practice Chief, Speech-Language Pathology and Specialist, International Relations & IPE at Baycrest. She has 20+ years clinical experience in communication and swallowing disorders in adults/geriatrics. Lisa has lecturer status at University of Toronto, Dept of Speech Pathology. Lisa has published and presented internationally on topics in speech pathology and Interprofessional education. She has an MS (University of Wisconsin-Madison) and is registered with the College of Audiologists and Speech-Language Pathologists of Ontario.

Dr. Cindy Grief is a graduate of the University of Toronto’s medical school. She is an Assistant Professor of Psychiatry at Baycrest, a geriatric facility in Toronto, Canada where she has a full time clinical practice. She is also the Medical Program Director for Baycrest’s Mood and Related Disorders Clinic. In 2012, Dr. Grief completed the Faculty of Medicine’s Centre for Faculty Development’s Education Scholars Program. This experience has fostered her interest in interprofessional education.

Arpit Chhabra is a Project Assistant at Baycrest who collaborates on different interprofessional education projects. On this project, he aims to contribute to the development of the education series and on-line forum that facilitates dialogue and knowledge exchange among health care professionals, to ultimately affect improved clinical practice and patient care in geriatric psychiatry. Arpit graduated from the University of Toronto (2011) with a BSc.(Hons.) in Psychology and Neuroscience, focusing on aging and memory processes.
3E-4. Physician and Patient Recommendations for Promoting Integrated Pediatric Behavioral Health Care Teams

Oral Presentation

- **David Kolko**, University of Pittsburgh, School of Medicine, Pittsburgh, PA, USA
- **Trina Orimoto**, University of Pittsburgh, School of Medicine, Pittsburgh, PA, USA
- **Kevin Simon**, SIU, School of Medicine, Springfield, IL, USA

Submitted abstract:

**Background and Objectives:** Although the integration of behavioral health (BH) services in pediatric primary care is a national priority (Affordable Care Act), there is limited empirical information to guide its design and implementation (Kolko & Perrin, in press). This presentation presents feedback from primary care providers (PCPs) and families regarding implementation barriers, benefits, and recommendations to facilitate successful incorporation of pediatric BH services. Such information may enhance the feasibility and sustainability of integrated BH care.

**Methods:** We conducted 3 RCTs within a practice-based research network from 2000 to 2013. An adapted collaborative care intervention (Doctor Office Collaborative Care; DOCC) was compared to enhanced usual care. Process and outcome measures were collected via a longitudinal mixed method approach from PCPs (N=80), and children and their caregivers (N=560). DOCC evidenced numerous improvements in care processes, pediatrician effectiveness, child problems, parental stress, individualized targets, and consumer satisfaction (Kolko et al., 2010; 2012, in press).

**Results:** At baseline, most PCPs held beliefs that focused on the potential burdens to delivering BH care (e.g., time, family denial of diagnoses). After implementation, the PCPs identified both key barriers (e.g., outside referral limitations, access to medical doctors, transportation) and benefits (e.g., flexible communication, consultation, teaching skills) to applying collaborative care. Pediatricians also offered recommendations for sustaining on-site collaborative care (e.g., providing: access to a psychiatrist, quick-in house services, flexible therapy hours, monitoring progress, designated communication system, trainings for PCP diagnostic skills). Certain desirable characteristics of care managers were also identified (e.g., interpersonal skills, diagnostic expertise).

**Implications:** Results will be discussed in terms of their implications for development, education, and evaluation of integrated BH care teams in clinical practice. Key recommendations will be reviewed for enhancing interprofessional education and creating and preparing teams that incorporate physical and BH providers who serve children and their families.

**Author Biographies**

David J. Kolko, Ph.D., ABPP, is Professor of Psychiatry, Psychology, Pediatrics, and Clinical and Translational Science, at the University of Pittsburgh, School of Medicine. He is Director of the Special Services Unit at Western Psychiatric Institute and Clinic. This program is devoted to the development and dissemination of evidence-based practices and collaborative care interventions for children/adolescents served in diverse community settings including juvenile justice, child welfare, pediatric primary care, and mental health.

Trina Orimoto, M.A. is a Ph.D. candidate in clinical psychology at the University of Hawaii at Mānoa and a predoctoral intern at the University of Pittsburgh, School of Medicine. Her program of research examines issues of dissemination and implementation science in community-based mental health.
settings. This includes questions about (1) mental health service utilization and engagement, (2) delivery of evidence-based practices, and (3) outcome accountability.

Kevin Simon is a fourth year medical student at Southern Illinois University School of Medicine. He is a graduate of Morgan State University. Kevin was awarded the 2013-2014 National Institute of Mental Health, Medical Student Fellowship in Mental Health Research administered by the Department of Psychiatry at the University of Pittsburgh, School of Medicine. During this fellowship, Kevin has focused his efforts on the study of interprofessional collaborative care models among mental/behavioral health providers.

3F. Interprofessional Collaborative Practice: A Framework Driven Approach

Panel Presentation

Program abstract: During this session presenters will demonstrate how a framework driven approach provides a blue print for implementing and sustaining interprofessional collaborative practice and healthcare transformation. Lessons from over 300 health care organizations who have implemented the framework will be shared.

- Michelle Troseth, Elsevier Clinical Solutions, Grand Rapids, MI, USA
- Tracy Christopherson, Elsevier Clinical Solutions, Grand Rapids, MI, USA
- Barbara Atkins, University of Kentucky Healthcare Enterprise, Lexington, KY, USA
- Diane Humbrecht, Abington Health, Abington, PA, USA

Submitted abstract:
Background: Today’s health care workforce is being asked to work in collaborative, integrated healthcare teams to achieve the goal of delivering patient centered, safe, effective care that meets the growing and complex needs of an aging population. Having been trained in isolation, the current healthcare workforce is unprepared to collaborate as a team in the complex healthcare settings they are in today. While interprofessional education will prepare the health care workforce of tomorrow to work interdependently and collaboratively, it will not address the fragmentation that currently exists within healthcare organizations. If interprofessional education is to be successful and the outcomes sustained, we must synchronize our efforts in both the practice and academic settings. The purpose of this presentation is to explore how a framework driven approach can be utilized to guide interprofessional practice and culture transformation at the point of care by providing the required infrastructures, process and tools that support team based care and interprofessional collaboration.

Objectives:
1. Describe a framework driven approach to achieving Interprofessional Collaborative Practice
2. Identify the barriers and opportunities in advancing Interprofessional Collaborative Practice
3. Identify tools, processes and infrastructures that can aid in achieving the core competencies for interprofessional collaboration

Method: Presenters will describe the components of the framework and how each component supports the core competencies for collaborative practice. Lessons learned from over 300 rural, community and university clinical settings that are part of a large healthcare Consortium in the USA and Canada who have implemented the framework will be shared. The session will close with an interactive dialogue between participants and the panel.
Results: The Consortium’s collective work has resulted in clinical, financial and operational outcomes related to healthy work cultures, evidence-based practice, interprofessional documentation including care planning and evaluation, and partnership councils. The cycle of organizational transformation ensures support for the professional process of care, scope of practice/service across the continuum of care, integration and interoperability, evidence-based tools, interprofessional practice, and research-based and updated information.

Implications: The framework offers a blueprint for interprofessional collaborative practice. The models within the framework have been replicated in multiple settings preventing the need to re-invent or remake the cycle of organizational transformation. Each model impacts both culture and practices, includes tools that are intentionally designed and evidence-based, and is action oriented, outcome producing, replicable, capacity building and technology enabled.

Author Biographies
Michelle Troseth, MSN, RN, DPNAP, FAAN is the Chief Professional Practice Officer for Elsevier Clinical Solutions. She has over 25 years of experience in co-designing and implementing evidence-based practice and technology infrastructures for patient-centered care and interprofessional integration across hundreds of healthcare settings. Michelle provides board leadership for organizations including The TIGER Initiative Foundation and the National Academies of Practice. She has authored several chapters/articles related to professional practice, evidence-based practice, technology and cultural transformation.

Tracy Christopherson, MS, BAS, RRT is the Director of Interprofessional Education and Practice for Elsevier Clinical Solutions. She has been a leader in creating interprofessional practice environments for over 20 years. Her experience comes from coaching and mentoring numerous organizations across the United States and Canada in advancing interprofessional integration and implementing an integrated clinical practice framework to strengthen practice at the point-of-care. She is passionate about bridging the gap between interprofessional education and practice.

3G-1. Solving Interprofessional Clinical Scheduling with Scalability: Common Challenges, Uncommon Solutions, and Michigan’s Experience

Oral Presentation

- Craig Donahue, Michigan Health Council, Okemos, MI, USA
- Ajay Arumugam, Michigan Health Council, Okemos, MI, USA

Submitted abstract: Methods: Where are the other professions that I could partner with to create an interprofessional opportunity? How do I get team members to align their schedules for a collaborative experience? Do I have time to help organize this effort? Individuals grappling with these types of questions should participate in this session’s roundtable discussion facilitated by the Michigan Health Council. Experiences from Michigan will be offered as needed to help attendees understand the key elements of a productive interprofessional partnership that can serve a few institutions, one community, or a whole region.

Objectives: Session objectives include: how to form an effective working group, addressing common challenges, ways to overcome conflict, and understanding how to build for the long term.
**Background:** Below is current information on the Michigan experience after five years of construction, rebuilding, and renovation.

The Alliance for Clinical Experience (ACE) Matching and Placement Program (MAPP) is an Internet-based clinical rotation tool that offers a simple, sustainable, and secure platform for providers, faculty, students, and clinical placement coordinators to arrange clinical placements through a common process. ACEMAPP features a learning management system, which currently includes three standard e-learning courses and assessments: OSHA, Bloodborne Pathogens, and HIPAA.

ACEMAPP facilitates interprofessional education by detecting overlapping rotations across different professions at common clinical sites. Once clinical placement coordinators identify overlap, they can message other programs to establish a team-based rotation and deliver any common curriculum prior to the rotation start date. A pre- and post-survey and unique system views by user type allows for additional customization based on each interprofessional rotation. The ACE Education to Practice Program at www.education2practice.org provides additional information to help users build their own interprofessional experiences.

**Results:** Accomplishments facilitated by the Alliance for Clinical Experience include:

- Increased Detroit Medical Center Health System total number of students participating in clinical rotations by 50% after implementing the ACE PLACEMENT System (comparison of fall 2007 to fall 2008 and winter 2008 to winter of 2009).
- Increased system-wide approved student hours (+21%) and rotation slots (+23%) from academic year 08-09 to 09-10.
- Collaborations with 70 schools/programs and 42 member clinical sites and over 180 nonaffiliated hospitals and primary care facility profiles.
- Certification of over 6,000 students and 900 full-time and adjunct faculty in common compliance requirements each year.
- Licensed the ACEMAPP system to Ohio (26 schools and 27 clinical sites) and Oregon (18 schools and 31 clinical sites).
- Piloting ACEMAPP in Indiana with the Rural Health Innovation Collaborative for multiple program types including Nurse Practitioner, Physician Assistant, Medicine, Social Work and Psychiatry. This opportunity includes the development of an Interprofessional Education Scheduling component in the system.
- Implications Interprofessional clinical scheduling and course delivery is often cited as a barrier to building an environment where individuals can learn about, from, and with others. The roundtable discussion enables session attendees to discuss their particular issues and use Michigan’s experience to help build their own creative solutions.

**Author Biographies**

Craig Donahue serves as Vice President & Chief Operating Officer at the Michigan Health Council and Executive Director of the Alliance for Clinical Experience (ACE), which is housed at the Michigan Health Council. ACE has helped the State of Michigan’s Department of Community Health win over $2.7 million in interprofessional grant funds since early 2012 from the U.S. Department of Health and Human Services Health Resources and Services Administration.

Ajay Arumugam serves as Project Manager for the Alliance for Clinical Experience (ACE) at the Michigan Health Council. He is the lead staff member facilitating the development of interprofessional features.
within the Matching and Placement Program (MAPP). Ajay’s professional expertise includes: major web design methodologies, HyperText Markup Language (HTML), Cascading Style Sheets (CSS), PHP (server scripting language), and database design, development, maintenance.

3G-2. Optimizing Interprofessional Learning in Practice: An innovative booking model

Oral Presentation

- Aaron Isted, Liverpool Heart and Chest Hospital, NHS Foundation Trust, Liverpool, England, UK
- Steven Colfar, Liverpool Heart and Chest Hospital, NHS Foundation Trust, Liverpool, England, UK
- Elaine Hartley, Liverpool Heart and Chest Hospital, NHS Foundation Trust, Liverpool, England, UK
- Emma Miello-Constantine, Liverpool Heart and Chest Hospital, NHS Foundation Trust, Liverpool, England, UK

Submitted abstract:
Interprofessional Learning (IPL) has continued to remain at the forefront of healthcare education. Its role towards optimizing patient centered care has been well recognized, however its application in practice has often proved problematic with logistical and communication shortfalls impacting on the overall learning experience (CAIPE, 2013).

It is for these reasons that Liverpool Heart and Chest Hospital (LHCH) has developed and integrated a Trust wide “IPL Booking System”, effective from June 2013. This novel booking system which spans across 45 practice areas is accessible to all learners in practice and provides the ability to view, book and attend a range a multi-professional practice environments across medicine, nursing and allied health.

In order to establish and implement the IPL Booking System, a fourfold process was undertaken. Initial audit collaborations between LHCH and local higher education institutes ensured that each practice area met regulatory education standards (NMC, 2008a HCPC, 2012). Link staffs were identified for each practice area as a point of contact for booking requests and a booking criterion agreed. This incorporated the discipline, learner year of study and type of IPL experience available e.g. wards, outpatient clinics, theatre and consultations. Finally a user friendly calendar format for each practice area was created with the IPL opportunities made visible. Learners could then book through selecting the booking calendar, accessing the criteria and emailing a request. Once these final steps were complete, a feedback mechanism was established via an online survey for each area.

Since the launch of the IPL Booking System, of the 183 learners in practice over 40 spoke bookings have been made a month and continue to rise. This logistically sound method in the provision of IPL has continued to generate positive feedback and is now considered a vital tool in the overall IPL experience here at LHCH.

References:

Author Biographies

A. Isted: Aaron is currently working as a Practice Education Facilitator at Liverpool Heart and Chest Hospital. Over 4 years working as a clinical exercise physiologist for the National Health Service, with a keen interest in interprofessional and strategic education.

S. Colfar: Steven is currently working as Deputy Head of Learning and Development at Liverpool Heart and Chest Hospital. A staff nurse by background with specialism’s in acute cardiothoracic care. Previous experience has occurred on surgical wards and critical care units.

E. Hartley: Elaine is currently working as a Sister Nurse on a Post Op Surgical Ward at Liverpool Heart and Chest Hospital. Previous experience as a Practice Education Facilitator for 4 years with further experience as staff nurse on the surgical wards at Liverpool Heart and Chest.

E. Miello-Constantine: Emma is currently working as a Staff Nurse on Coronary Care Unit. As mentor link for the area, Emma has been involved with incorporating interprofessional education into the workplace.

3G-3. Large Scale Interprofessional Education through an Interactive Web-Based Platform

Oral Presentation

- Sarah Hobgood, Virginia Commonwealth University, Richmond, VA, USA
- Peter Boling, Virginia Commonwealth University, Richmond, VA, USA
- Alan W. Dow, Virginia Commonwealth University, Richmond, VA, USA

Submitted abstract:

Background: Interprofessional collaboration is increasingly essential in health care, yet educators face daunting logistical challenges when attempting to provide team-based IPE for large numbers of students, particularly if planned experiences are longitudinal.

Objectives: To design, implement, and assess a web-based asynchronous learning environment in which we can form, engage, and evaluate groups of learners during extended case-based learning.

Methods: We developed an innovative web-based case system that provides: secure registration; automated, scheduled distribution of discipline-specific information to the members of learner teams; a structured space for sharing relevant information; and a threaded asynchronous dialogue. During the learning process, students follow a learning cycle where they answer a series of multiple choice questions individually (documenting individual competency) and then collaborate in the case system to answer the same questions as a group. Score from the questions and 360 peer evaluations permit objective measures of learner, team, and collaborative competencies, plus insight into curricular strengths and weaknesses. Current content is focused on geriatrics with a target population of senior students from the Schools of Medicine, Nursing, Pharmacy and Social Work.

Results: Between August 2012 and April 2014, more than 1,200 students from four health professional schools will have completed the case. Scores range between 65% and 95% of the maximum possible, suggesting that the items are well calibrated to the learners. Student activity from the first 529 users showed median logins of about 180 per user with little variance by discipline, higher team scores than
individual scores, significant correlations between team score and measures of team activity in the system, and evidence that shared leadership and student collaboration led to better results.

**Implications:** Using a web-based platform, students had a robust, large scale team-based learning experience that overcame logistical barriers and provided powerful assessment data.

**Author Biographies**
Sarah Hobgood is in her fifth year as an assistant professor of geriatric medicine and director of the Geriatric Consult Service and internal medicine resident geriatric education program at Virginia Commonwealth University

Peter Boling, MD is professor and chair, Division of Geriatric Medicine at Virginia Commonwealth University where he has led and published on curricular reform and innovation for over 2 decades. His 32 year career centers on geriatrics and interprofessional models with a constant theme of team-based models of care for frail and at-risk older adults. He is the PI for the grant which funded development of the case system and is co-leading its dissemination.

Alan Dow, MD, MSHA is an associate professor of Medicine and assistant vice president of health sciences for interprofessional education and collaborative care. He leads the design, implementation, and assessment of major interprofessional programs across five health science schools with over 3,200 clinical health science students and a major academic health system. He has published research in Academic Medicine, The Journal of Interprofessional Care, and The Journal of Continuing Education in the Health Professions.

**3G-4. Synchronous Case Conferences as a Successful Strategy for Establishing Interprofessional Clinical Student Experiences and a Collaboration Ready Healthcare Workforce**

*Oral Presentation*

- **Amy E. Leaphart**, Medical University of South Carolina, Charleston, SC, USA
- **Kelly Ragucci**, South Carolina College of Pharmacy, MUSC Campus, Charleston, SC, USA
- **David Howell**, Medical University of South Carolina, College of Health Professions, Charleston, SC, USA
- **Deb Brown**, Medical University of South Carolina, College of Health Professions, Charleston, SC, USA

**Submitted abstract:**

**Background:** Since 2011, the Medical University of South Carolina has been involved in multiple pilot projects to provide students the chance to meet in small interprofessional groups to discuss clinical cases and strategies to improve care specific to those cases. In response to difficulty bringing students on rotation together to meet in person, we implemented a pilot project in 2012 that enabled students to complete the same interprofessional activity synchronously online. The results of this pilot showed that synchronous online case conferences provided a viable opportunity for students to work together collaboratively online to share profession specific knowledge and increase awareness of the value of interprofessional collaboration. In the fall of 2013, a new program was implemented in order to further improve the process, expand the scope of the pilot and increase the number of participants and professions.
Objectives:
- Describe a model of synchronous online activity that promotes collaborative team approach for clinical level students.
- Discuss best practice elements of this model as they are linked to prior experiences and feedback.
- Assess and evaluate the value and usefulness of a synchronous online interprofessional clinical student activity for creating a collaboration ready healthcare workforce.

Methods: Pharmacy, PA, OT, PA and Nursing students participated in a series of online synchronous meetings over a 2 month timespan to discuss example cases from their own clinical rotation experience. Over the course of the pilot students participated in multiple feedback methods (verbal and written, open ended and likert questions) to gauge the student perceived value of the online interaction for enhancing care of patients and applicability of the pilot activity to the clinical setting.

Results/Implications: Student participant data confirms value and relevance of this pilot project for students in clinical phase of education. In addition, students see applicability of this experience to future clinical experiences.

Author Biographies
Kelly R. Ragucci, PharmD, FCCP, BCPS, CDE received her Doctor of Pharmacy degree from the University of Toledo. Subsequently, she completed a clinical pharmacy residency in Family Medicine at MUSC. Kelly currently holds appointments as Professor in the Departments of Clinical Pharmacy and Outcomes Sciences and Family Medicine at MUSC. She is also the Chair of the Department of Clinical Pharmacy and Outcomes Sciences. Her teaching and research interests include women’s health issues, interprofessional education and the scholarship of teaching.

Amy Leaphart, MA, MS is the Program Manager for the Office of Interprofessional Initiatives at the Medical University of South Carolina. She has an MA in English and Literature, an MS in Health and Exercise Science, and 15 years of experience teaching in the humanities, social sciences, and health professions education. Currently, she serves as the course director for IP710: Transforming Healthcare for the Future, the required interprofessional education course involving over 800 students per year.

3H-1. Educating the Interprofessional Team for Vulnerability: An Interprofessional Course Preparing Students for Working with Vulnerable Populations

Oral Presentation
- Joy Doll, Creighton University, School of Pharmacy and Health Professions, Omaha, NE, USA
- Ann Laughlin, Creighton University, College of Nursing, Omaha, NE, USA
- Kim Begley, Creighton University, School of Pharmacy and Health Professions, Omaha, NE, USA
- Martha Todd, Creighton University, College of Nursing, Omaha, NE, USA
- Ann Ryan Haddad, Creighton University, School of Pharmacy and Health Professions, Omaha, NE, USA

Submitted abstract:
Background: Vulnerability is a very complex issue. Working with vulnerable populations requires that students not only have the knowledge to develop skills but also need to explore their values regarding specific populations. Preparing students to work as health care professionals with the knowledge and
sensitivity to "care" in the face of complex factors that influence health is challenging and requires innovation (Kumagai & Lypson, 2009). One of the founding principles of the IPEC Competencies is Ethics (2011). Grounded in this approach is the desire for health care providers to engage in the “common good” for individuals the health care team serves. The authors of this proposal questioned – how do we move beyond basic interprofessional education to educate collaborative health care teams to provide care with vulnerable people?

Objectives: By the end of this session, participants will be able to:
- Summarize the benefits of interprofessional collaborative education for vulnerable groups
- Relate the impact of poverty on vulnerability through personal reflection
- Evaluate a pedagogical approach to teaching interprofessional education in a real world context with the complexities of poverty and vulnerability

Methods: An interprofessional group of faculty collaborated to establish and implement a sustainable pro bono clinic in an impoverished area close to the University. In this complex environment, interprofessional collaboration was shown to be most effective in meeting the needs of the population of the clinic. From the clinic was born the idea to prepare students for interprofessional collaborative care to enter practice prepared to work with vulnerable patients with complex social challenges that impact health and wellbeing. The purpose of this workshop is to provide a background and context for the development of this course to serve as a model for implementing such a course across health science curricula.

Results: The course is in its inaugural year so assessment is ongoing. However, initial findings from students and the participants find that both see benefit in such an initiative. More assessment results will be collated and shared at the conference.

Implications: Interprofessional collaborative practice is not strictly for a traditional model of clinical practice. It can serve as a model for addressing the complex needs of vulnerable individuals. Participants will leave this workshop with a sense of how to implement interprofessional education in a unique and compassionate manner.

References:

3H-2. Student Led Clinics: A win-win for Interprofessional Education and Practice

Oral Presentation
- Sue Murphy, University of British Columbia, Vancouver, BC, Canada
- Hyman Gee, Royal Columbian Hospital, New Westminster, BC, Canada
- Stacey Rigby, Royal Columbian Hospital, New Westminster, BC, Canada
- Donna Drynan, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
Lesley Bainbridge, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada

Submitted abstract:

**Background:** Despite a commitment to developing collaborative practice competencies, providing an appropriate number and quality of clinical Interprofessional learning experiences for health professional students can be challenging for academic institutions. Concurrently, health authorities are challenged to provide integrated health services for ambulatory patients with chronic disease issues or with multiple co-morbidities.

**Objectives:** The objectives were to develop a clinical placement site which would increase the number of locations allowing students to experience Interprofessional collaborative practice, whilst providing health authorities with an integrated service model for patients with complex needs.

**Methods:** A collaborative partnership between Fraser Health Authority (FHA) and the University of British Columbia (UBC) was formed to establish an Interprofessional student-led outpatient clinic (SLC). Initially funded by a grant from UBC, sustainability funding is provided by FHA. Located in an acute care facility, the clinic hosts up to 6 Physical Therapy (PT), 4 Occupational Therapy (OT), and 2 Medical students at any one time. The students are responsible for all aspects of clinic functioning and patient care under the supervision of a professional or Interprofessional supervisor.

**Results:** From July 2009 to March 2013, 138 students from OT, PT and Medicine have been placed in the clinic, treating over 1100 patients. The majority of patients are age 65 or older, with CVA, fractures and joint replacements the most frequently seen conditions. Student Self-Assessment and Observer Assessment of Collaborative Practice Competencies show marked improvement in several areas, especially in role clarification. Students report a high degree of satisfaction with the placement experience, particularly in the area of peer learning.

**Implications:** SLCs provides a venue for developing collaborative practice competencies while providing much needed services to clients who require an Interprofessional approach to management of their health needs. This model has been replicated in 3 other publicly funded facilities throughout the province.

**3H-3. An Experiential Interprofessional Workshop for Building Cultural Competency**

*Oral Presentation*

- Emily Akerson, James Madison University, Harrisonburg, VA, USA
- Anne Stewart, James Madison University, Harrisonburg, VA, USA
- Marsha Mays-Bernard, James Madison University, Harrisonburg, VA, USA

Submitted abstract:

**Background:** Cultural competency is identified as a specific competency for successful interprofessional collaborative practice (IPEC, 2011). The Building Cultural Competency Workshop (BCCW) at James Madison University (JMU) has been included as a required experience for over 2,600 nursing, social work, occupational therapy and physician assistant students over the last 10 years. A comprehensive review of the BCCW was completed during the summer 2012 by an interprofessional team. Two members of the team attended the National Conference on Race and Ethnicity (NCORE) and used
information to guide the workshop revisions. Team members reviewed the literature and consulted with JMU’s Special Assistant to the President on Diversity. The Planning Team adopted the definition of cultural competency from “Cultural Competence Education for Students in Medicine and Public Health: Report of an Expert Panel” (July 2012) which reads “Cultural competence is defined in the broader context of diversity and inclusion as the active, intentional, and ongoing engagement with diversity to increase one’s awareness, content knowledge, cognitive sophistication, and empathetic understanding of the complex ways individuals interact with systems and institutions.” (Milem, 2005)

The BCCW explores issues of diversity, power, and privilege. Participants are invited to examine personal, professional and institutional values that influence their thoughts, feelings, and actions through a series of shared readings, video and group presentations, activities and respectful discussion. The BCCW provides a forum for participants across professions to acknowledge personal, professional, and institutional dynamics that influence the quality of their patient/client care, as well as their personal and professional interactions with patients, families, colleagues, agency administration, and the broader society. Resources are provided for implementing the workshop and ongoing study.

**Objectives:**
- Describe the benefits of using interprofessional cultural competency in IPC coursework or trainings.
- Identify, at least, 5 creative experiential strategies and techniques for promoting IPC teamwork in a climate of mutual respect and shared values.
- Demonstrate innovative activities to facilitate interprofessional cultural competency training (Hold on activity, culture/subcultural activity, alternative introductions, group discussion of cases).
- Develop a personal plan for implementing strategies in their course or trainings.

**Methods:** The current proposal will allow participants to experience and process the individual parts of the interactive Building Cultural Competency Workshop and process the experience as a whole. In addition, it will allow participants to learn facilitation strategies for workshops held at their own institutions. Specifically, this presentation will provide readings, movie clips, and the experience of group facilitation around the topic of cultural competency.

**Results:** Participants will develop a toolkit for training students in the lifelong process of building cultural competency. Group discussions will allow participants to process the information presented and make applications to their own setting.

**Implications:** Including cultural competency training for health professional and students in health professional programs builds a specific competency for successful interprofessional practice. Participants will have tools for developing effective training for students.

**Author Biographies**
Emily Akerson, RN, FNP-BC, graduated with a BSN from Cornell University, an MN, from the University of Washington and is currently enrolled in a doctoral program at University of Virginia. She has over 20 years of experience as a nurse practitioner. She is an Associate Director of the Institute for Innovation in Health and Human Services (IIHHS) at James Madison University (JMU). Her responsibilities include facilitating interprofessional education and collaborative practice through the IIHHS.
Anne Stewart, Promoting creative and playful therapeutic interventions and collaborations across the country and throughout the world is a regular activity for Anne Stewart. Anne is a Professor of Graduate Psychology at James Madison University in Virginia where she teaches and supervises graduate students in interprofessional ethics, play therapy, family therapy, and clinical practicum. She serves as the faculty coordinator for the Interprofessional-International concentration and has led student courses in the Dominican Republic and Costa Rica.

Marsha Mays Bernard has worked in higher education for 25 years and is currently the Associate Vice-President for Multicultural Awareness and Student Health at James Madison University. She has oversight for the Center for Multicultural Student Services and serves as the chairperson for the Student Affairs and University Planning Diversity Council.

3H-4. Interprofessional Education in the Clinical Training of CAM students

Oral Presentation

- Beth Rosenthal, Academic Consortium for Complementary and Alternative Health Care, Chicago, IL, USA
- Anthony Lisi, Veterans Health Administration, West Haven, CT, USA

Submitted abstract:

Today’s healthcare environment requires collaboration and cooperation among healthcare professions, whether working in a ‘virtual’ team or in an integrated clinical setting. Patients are best served when healthcare providers understand and respect each other’s professions. Although in some cases educational accreditations standards may require that students know how to communicate, refer to, and collaborate with practitioners in professions different than their own, there are few, if any, firm, specific requirements about how this is to be achieved. This project ascertains the extent to which students in integrative health disciplines are being educated and trained to practice with providers from different disciplines.

The objective of this study is to describe and document the extent and characteristics of interprofessional education in the clinical training of students at accredited CAM academic institutions.

Surveys were sent to the persons responsible for clinical training at approximately 185 accredited CAM academic institutions.

These surveys will provide information about the types of venues in which the majority of CAM student clinical training takes place; provider types involved in these settings; and characteristics of interactions between students and these providers.

Findings will give an indication as to whether CAM students are receiving clinical training to prepare them to work with healthcare providers from other professions. Knowledge about whether student are being exposed in clinical training to practitioners in disciplines other than their own, characteristics of interprofessional interactions in those cases, whether certain clinical training settings are more likely to be integrated and whether specific disciplines work more or less with other disciplines may help academic institutions to identify best practices and develop strategies for interprofessional education in clinical training settings. Findings may also lead accreditation agencies to include specific standards regarding interprofessional clinical training.
**Author Biographies**
Beth Rosenthal, PhD, MBA, MPH, is the Assistant Director of the Academic Consortium for Complementary and Alternative Health Care (ACCHAC). Anthony Lisi, DC, is the Director of the Veterans Health Administration Chiropractic Service, an Associate Professor at the University of Bridgeport College of Chiropractic and a member of the Academic Consortium for Complementary and Alternative Health Care Clinical Working Group.

**31. Interprofessionalism in practice: a novel approach to managing and coordinating care for post-discharge trauma patients using a non-physician led team**

*Panel Presentation*

**Program abstract:** The UPMC Falk Outpatient Trauma Clinic is a teaching facility staffed by a large non-physician led interprofessional team. This site represents a sterling example of a practice site operating at the nexus between interprofessional practice and education. In our panel discussion we will deliver five presentations describing the full spectrum of the program beginning with the genesis of the non-physician team through the pragmatic organizational and operational strategies required to execute the vision, ending with the impact of the team on the Triple Aim outcomes.

- **Raquel Forsythe**, University of Pittsburgh, Pittsburgh, PA, USA
- **Joel Stevans**, University of Pittsburgh, Department of Physical Therapy, Pittsburgh, PA, USA
- **Ben Reynolds**, UPMC Physician Services Division, Pittsburgh, PA, USA
- **Paul Rockar**, UPMC Centers for Rehab Services, Pittsburgh, PA, USA
- **Pamela Toto**, University of Pittsburgh, Department of Occupational Therapy, Pittsburgh, PA, USA
- **Julia Driessen**, University of Pittsburgh, Graduate School of Public Health, Pittsburgh, PA, USA

**Submitted abstract:**

**Background:** The UPMC Falk Outpatient Trauma Clinic is affiliated with the University of Pittsburgh and serves as an outpatient clinical teaching facility. In 2011 the staffing model changed from a resident run clinic to one run exclusively by advanced practice providers (i.e., CRNP & PA). In addition to the full-time clinical staff there are now four nurse practitioner and three physician assistant trainees rotating through the clinic annually.

The clinic sees approximately 1,200 patients per year following discharge from the inpatient trauma service to assess recovery, provide management and coordinate additional services. This patient population has a high need for post-discharge rehabilitation services; however, this need was going unmet. As a result of this quality gap, the interprofessional team was expanded in 2013 to include clinicians and trainees from physical, occupational, and speech therapy, nutrition and rehabilitation counseling.

**Objectives:** The aims of the study were: 1) identify implementation barriers and facilitators to the expansion of a non-physician led healthcare team; 2) longitudinally assess interprofessional team performance; and 3) evaluate the impact of the expanded team on patient satisfaction, quality of care, and healthcare costs.

**Methods:** This study used a mixed method, controlled pre-post research design. Direct observation and formal/informal interviews were used to evaluate program (i.e., clinical and academic) implementation. Barriers and facilitators to implementation are categorized and reported within the context of the
Consolidated Framework for Implementation Research. Team performance will be measured using the previously validated Interdisciplinary Team Performance scale at baseline, one and six months. Finally, patient satisfaction, cost and quality will be assessed with pre-post clinical and financial data. The expanded non-physician team will be compared with multiple control groups. Multiple control groups and propensity score matching will be used to minimize potential confounding. Descriptive and risk adjusted statistics will be reported.

**Results:** Multiple barriers to implementation were identified. The majority of these barriers were categorized as environmental and organizational. Midcourse corrections were required throughout the implementation process to overcome these barriers. Team performance and satisfaction, cost and quality data collection is underway.

**Implications:** This study qualitatively and quantitatively assesses the implementation, functioning and outcomes of a non-physician led clinic. As health systems embrace models, such as ACOs and bundled payments, they will need to consider implementation of innovative, lower cost and high quality workforce solutions, such as this model. Additionally, it is incumbent on academic institutions to provide their trainees with rich interprofessional experiences. This study adds to the research evidence supporting feasibility and benefit of these new models.

**Panel Discussion & Target Audience:** The Falk Trauma Clinic represents a sterling example of a practice site operating at the nexus between interprofessional practice and education. In our panel discussion we will deliver five presentations describing the full spectrum of the program beginning with the genesis of the non-physician team through the pragmatic organizational and operational strategies required to execute the vision, ending with the impact of the team on the Triple Aim outcomes. As such, we believe our panel presentation will appeal to educators, clinicians, and system leaders alike.

**Author Biographies**

Raquel Forsythe, MD, FACS, is an Assistant Professor of Surgery and Critical Care Medicine at the University of Pittsburgh where she practices Trauma and Acute Care Surgery. She is Associate Program Director for the General Surgery Physician Residency Program and the Director of Education for the Advanced Practitioner Residency in General Surgery. She has also taught Trauma Care and Resuscitation throughout Western PA to Paramedics and Emergency Medical Technicians.

Ben Reynolds, PA-C, is a physician assistant with the division of trauma and general surgery at UPMC Presbyterian. He is the director of the UPMC Office of Advanced Practice Providers, which oversees 1,400 advanced practice providers throughout the UPMC system. Additionally, Reynolds serves as a Clinical Assistant Professor of Surgery for the University of Pittsburgh Medical School, University of Pittsburgh School of Health and Rehabilitation Sciences, and Adjunct Assistant Professor of Physician Assistant studies for Chatham University.

Paul Rockar, PT, DPT, MS, is the CEO of the UPMC Centers for Rehab Services. UPMC Centers for Rehab Services is a certified rehabilitation agency in Western Pennsylvania that provides physical therapy, occupational therapy, and speech therapy in a variety of settings including hospitals, skilled nursing facilities, and outpatient clinics. Dr. Rockar received a B.S. in Physical Therapy from the University of Pennsylvania, an M.S. from the University of Pittsburgh, and Doctor of Physical Therapy degree from Temple University.
Pamela Toto, PhD, OTR/L, BCG, FAOTA, is an Assistant Professor in the Department of Occupational Therapy at the University of Pittsburgh. Board Certified in Gerontology and a Fellow of the American Occupational Therapy Association, Dr. Toto has over 20 years of experience as an occupational therapy clinician, manager and consultant in both community and long term care settings. Dr. Toto’s research agenda focuses on the development of client-centered strategies to promote independence and participation in older adults.

Joel Stevans, DC, PhD(c) is postdoctoral fellow in Department of Physical Therapy at the University of Pittsburgh. He received his BS in Biochemistry from Cal Poly, SLO, CA, his Doctor of Chiropractic from the Los Angeles College of Chiropractic, Whittier, CA, and is currently a doctoral candidate in Rehabilitation Sciences at the University of Pittsburgh. His research focuses on implementation science, interprofessional care models, and health services research.

3J. Student-led session: Interprofessionalism and Quality Improvement in Rural Care
Panel Presentation
Program abstract: This student-focused session will explore a quality improvement case from the Institute for Healthcare Improvement Open School. The importance of leadership, process redesign, and engagement of front-line staff and community leaders will be studied. Participants will work together to consider quality improvement steps that can be achieved through interprofessional collaboration.
- Meghan Bastin, University of Pittsburgh School of Dental Medicine, Pittsburgh, PA, USA
- Cara Mazzarisi, University of Pittsburgh School of Pharmacy, Pittsburgh, PA, USA
- Ryan Winstead, University of Pittsburgh School of Pharmacy, Pittsburgh, PA, USA

3K-1. Looking Beyond the Barriers to IPCP Clinical Education in Healthcare
Oral Presentation
- Daniel O’Brien, Auckland University of Technology, Auckland, New Zealand
- Marion Jones, Auckland University of Technology, Auckland, New Zealand

Submitted abstract:
Background: Collaborative interprofessional healthcare teams have been promoted in Canada for over 40 years. The WHO first supported the notion over 30 years ago and has since called for integration of interprofessional collaborative practice (IPCP) into healthcare and healthcare education. However integration of IPCP into the clinical education of undergraduate students remains limited. Barriers commonly cited to the integration of IPCP include; differences in professional language and culture, preconceived ideas of professions and professionals, curriculum structures, and staff attitudes and beliefs regarding teaching and education. Furthermore, other cited barriers to IPCP in education include administrative structures and insufficient resources.

Objectives:
1. Explore the structural and educational initiatives that have been embedded into a university-based, student-led healthcare clinic which facilitates IPCP.
2. Examine the perceived barriers to interprofessional learning and opportunities for change.

Methods and Results: We will discuss how barriers to interprofessional working were overcome in one area of practice, showing the focus should be person centred and that different professions should value
the diversity they bring to interprofessional learning (IPL). The management, staffing, teaching and clinic systems are explored to identify the steps that were undertaken to facilitate IPCP. The facilitation of IPCP required the development of a clinic mandate to implement IPCP, a change in the staff culture that was facilitated through IPCP staff activities, the development of clinic-based student IPCP activities and the integration of an electronic patient records system. Student feedback has been positive and the changes have been embedded into clinic practice.

**Implications:** The integration of IPCP into the clinical education of undergraduate health students is achievable but requires a multifaceted implementation strategy. Further research is required to explore the sustainability of this model of clinical education as well as the impact that IPCP clinical experiences have on the practice habits of the undergraduate students following completion their studies.

**Author Biographies**
Professor Marion Jones BA; M.Ed.Admin(Hons); PhD  Marion is Professor and Dean of University Postgraduate Studies at AUT University, Auckland. She is a Director of the National Centre for Interprofessional Education and Collaborative Practice in New Zealand. She is at present involved in co editing a book on Interprofessional Leadership. Marion's research and teaching areas include theory practice debate, interprofessional team practice, perioperative nursing, research methodology and developing a research culture including student/ supervisor relationships.

Daniel O’Brien Daniel is a lecturer in the School of Interprofessional Health Studies at AUT University, Auckland. He is presently involved in the implementation of an interprofessional practice model within the University’s healthcare clinic (AIH). Daniel is currently undertaking his PhD. in which he is exploring patients’ and clinicians’ beliefs and expectations regarding management of osteoarthritis in New Zealand.

**3K-2. Innovative and Authentic Interprofessional Education on a Grand Scale – No Big Deal!**

*Oral Presentation*

- **Nichola McLarnon**, Glasgow Caledonian University, Glasgow, Scotland, UK
- **Dora Howes**, Glasgow Caledonian University, Glasgow, Scotland, UK
- **Jamie McDermott**, Glasgow Caledonian University, Glasgow, Scotland, UK

**Submitted abstract:**
**Background:** Contemporary curricula in the health and social work professions are increasingly focussed on interprofessional education and practice as a key aspect of learning and preparation for professional practice. It is recognised, however, that successful and authentic IPE initiatives require novel learning environments, innovative teaching methods, and diverse active-learning activities (Ratka, 2013).

Within the School of Health and Life Sciences at Glasgow Caledonian University, interprofessional education for health and social work students is uniquely woven through the students' programmes of study from first to final year. This mandatory suite of IPE modules is delivered to one thousand students per year from sixteen professions/nursing fields of practice and across two institutions. These IPE modules are core to the curriculum, credit-bearing and focus upon the development of professional attributes and behaviours in level 1, evidence based practice in levels 2 and 3, and leadership and entrepreneurialism in level 4.
Objectives: This interprofessional panel/interactive presentation will focus specifically on aspects of delivering innovative, meaningful and authentic interprofessional learning experiences on a large scale. Case studies will be presented to illustrate innovative learning, teaching and assessment/feedback strategies. These will include:

- Mobile phone technology and the use of Textwall within the classroom
- Service user and carer involvement, as an enduring element within policy directives within the UK
- Interactive drama and theatre, whereby students can contribute, direct and question their learning in a large lecture theatre environment
- Use of peer and self assessment in IPE groupwork
- Electronic assessment and feedback

Methods: The challenge of modernising traditional approaches to create a learning environment that fosters student empowerment, proaction and enquiry will be explored. This session will be delivered using a world-cafe approach (Brown & Isaacs, 2005) to provide an opportunity for rich discussion, exchange of ideas and practical experience amongst delegates and presenters.

Results/Implications: Participants will gain knowledge and practical experience of a range of innovative delivery, assessment and feedback mechanisms for large scale teaching of IPE.

References

Author Biographies
Nichola McLarnon is a senior lecturer in Podiatry and Learning, Teaching and Quality Lead for the Department of Psychology, Social Work and Allied Health Sciences at Glasgow Caledonian University. She is module leader for the first year interprofessional module for allied health and social work students – delivered to 1000 students, crossing 16 disciplines and 2 institutions.

Dora Howes - after qualifying in 1984, Dora spent nine years in clinical practice within a general medical setting. She entered higher education in 1993 where she developed the first post-registration top-up degree for nurses in Lanarkshire. She then transferred to Glasgow Caledonian University in 2000 to focus on pre-registration nurse education. She has been involved with interprofessional education since 2004 and is currently co-module lead for one of the biggest interprofessional modules in Scotland.

Jamie McDermott is currently Programme Leader for the MSc (pre-registration) Occupational Therapy degree at Glasgow Caledonian University. He is interested in learning and assessment methods in IPE and more generally in how students use academic feedback to improve their academic performance. Jamie is currently a PhD candidate at GCU where his research is focused on Consultant Allied Health Professionals and how they contribute to care of people with long term conditions.
3K-3. Ensuring a continuum of interprofessional education and collaborative practice (IPECP) in the post-graduate professional training years

Oral Presentation

- Dewitt C. Baldwin Jr., Accreditation Council for Graduate Medical Education (ACGME), Chicago, IL, USA
- Joanne G. Schwartzberg, Accreditation Council for Graduate Medical Education (ACGME), Chicago, IL, USA

Submitted abstract:

Background: Despite experimentation with interprofessional teamwork and collaborative practice (IPECP) in healthcare delivery for over a century, and with interprofessional education (IPE) for nearly half a century, integration of IPECP into post-graduate education and residency training of young physicians has been overlooked. The Accreditation Council for Graduate Medical Education (ACGME) has moved to an outcomes-based curriculum requiring attainment of six professional competencies by all physicians in training. Program directors must train residents to "work as a member/leader of a health care team or other professional group" and to "work in interprofessional teams to enhance safety and quality of care". Supporting data from the AMA-Freida online database indicates that the number of residency training programs offering “formal instruction in interdisciplinary teamwork” has risen from 25.9% in 2008 to 46.2% in 2013. Many programs report structural changes designed to create enhanced learning environments for IPECP.

ACGME is initiating a new accreditation system for the over 120,000 physicians in training at more than 9,000 residency training programs in the US, as well as several other countries. "Milestones" in each of the six competencies are being implemented for each specialty and must be achieved by residents for graduation. These Milestones, developmental in nature, describe specific, graded, performance levels for skills, knowledge, and behaviors that residents must demonstrate, including those for increasing levels of competence in IPECP. Milestones are objectively evaluated each six months during residency training.

Objectives: 1) Describe the importance of interprofessional learning for physicians during residency education, 2) Identify best practices used by residency programs to create IPECP learning environments, 3) Summarize outcome evaluation related to IPECP; and 4) discuss global perspectives on the ACGME curriculum changes.

Methods: Moderator: Madeline Schmitt, PhD, RN, FAAN. Professor Emerita, University of Rochester School of Nursing will moderate the session. Presenter roles and topics follow:

2. Timothy P. Brigham, MDiv, PhD. Chief Of Staff and Senior Vice-President for Education. ACGME. The New Accreditation System: From core competencies to developmental milestones to evaluation of educational outcomes in IPECP.

The panel will be followed by reflections of Gerri Lamb PhD, RN, FAAN. Associate Professor, Arizona State University. She is principal investigator for a 3-year grant from the Josiah Macy Jr. Foundation to collaboratively develop and evaluate a graduate nurse/physician primary care curriculum.
Results: Raising the level of attendee awareness of accreditation changes around teamwork in medical residency training programs. Insights of panel, respondent and audience will be captured in writing by the moderator for future sharing.

Implications: Complementary and coordinated IPECP across the professions is enhanced by interprofessional dialogue, and by addressing gaps in the continuum of interprofessional learning within the professions.

3K-4. An overview of results from Clinical Interprofessional Training Units in Sweden and Denmark

Oral Presentation

• Flemming Jakobsen, Orthopedic Research Unit, Holstebro, Denmark

Submitted abstract:

Background: Clinical interprofessional education can take place in interprofessional training units (ITU) where students from different professions under supervision from trained staff provide care and rehabilitation for admitted hospital patients.
The first Scandinavian ITU which started in 1998 in Linköping has inspired other Swedish and Danish universities and institutions to establish ITUs which fit into their own setting.

Objective: To provide an overview of Swedish and Danish ITUs and to synthesize published findings from these.

Methods: The ITUs were identified via the Nordic Interprofessional Network’s homepage supplemented with personal communication with colleagues from the field.
Articles from peer reviewed journals were identified via systematic searching of the databases Pubmed and Cinahl supplemented with personal communication with colleagues from the field.

Results: Four Danish and fourteen Swedish ITUs were identified. Types of patients admitted to the ITUs in question were: orthopedic (10), geriatric (3), medical (3), emergency (1) and obstetric (1). Students were normally two weeks in the ITU. Most commonly represented were students from the professions nursing, medicine, occupational therapy and physiotherapy; nine other professions were separately represented.

Danish (7) and Swedish (17) articles revealed that the students reported on having improved their uniprofessional knowledge and strengthened their professional identity while learning about interprofessional collaboration. Equality, collaboration and common goals for the students were found to be important parameters for obtaining pedagogical and operational success in an ITU. Patients perceived their stay in an ITU to be highly satisfactory. And finally it was found that the running of an ITU can be cost-effective.

Implications: This presentation has demonstrated positive self reported results for students after clinical placement in ITUs. More research concerning the sustainability of the obtained results is necessary.
3N. Creating an instrument to measure the CIHC IP Collaboration Competencies

Roundtable Discussion

Program abstract: In 2010 when the Canadian Interprofessional Collaboration Competency Framework was released by CIHC, a group of IP Champions from 5 countries came together to help shape a measurement instrument to assess for the competencies’ presence in both pre-licensure and post-licensure learners. Their work resulted in a planned 3-round Delphi process generating collaborative ideas from a wide variety of IPE champions. To date two rounds have been completed. This workshop will provide participants, in small groups with a facilitator, to focus on translating items from round 2 for one of the competencies for round 3.

- Carole Orchard, Western University, London, ON, Canada
- Monica Moran, Central Queensland University, Rockhampton, Queensland, Australia
- Elizabeth Anderson, University of Leicester, Leicester, UK
- Madeline Schmidt, University of Rochester, School of Nursing, Rochester, NY, USA
- Lesley Bainbridge, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada

Submitted abstract:

Background: In 2010 when the Canadian Interprofessional Collaboration Competency Framework was released by CIHC, a group of IP Champions from 5 countries came together to help shape a measurement instrument to assess for the competencies’ presence in both pre-licensure and post-licensure learners. Their work resulted in a planned 3-round Delphi process generating collaborative ideas from a wide variety of IPE champions. To date two rounds have been completed. This workshop will provide participants with the opportunity to assist in generating items for Round 3 -- what should be tested for each competency.

Objectives: During the workshop participants will:

1. Review the competency study and its findings to date,
2. Consider which of these items are key to competency assessment,
3. Explore wording of each generated item,
4. Provide input into round 3-document for distribution across the 5 participating countries.
5. Discuss potential sites to pilot the instrument.

Methods: Participants will be provided with an overview of the CIHC competency framework and the Delphi process to date. They will then be divided into 6 small groups with each group assigned to work on one of the competencies. They will be asked to: (a) review the priority items generated by Round 2 respondents; and (b) consider whether wording needs to be changed to reflect measurement criteria [a set will be provided at the workshop]. They will then share their work with the total group. Work generated will be used by the CIHC International Working Group in development of the final Delphi round 3 before formulating the instrument. Participants will be asked if any of their programs/institutions will be interested in being part of the testing of the completed instrument to ensure a broad country-based testing of the instrument.

Results: The Delphi Round 2 results will be shared with the participants. The outcome of this workshop will be the Delphi Round 3 document.

Implications: The need to be able to measure IP Collaboration Competence in education and practice is critical to determining the impact of this form of practice on populations’ health outcomes. Using a
consistent measure across a variety of countries will support cross-country comparisons that may benefit some IP champions gaining interest in moving their IPCP delivery of care forward. From a research perspective such an instrument allows for multi-site studies and syntheses of study outcomes related to common items.

30. A scope on best practices in interprofessional practice & education across Europe: From Oulu to Ljubljana

Panel Presentation

Program abstract: The panel highlights inspiring and innovative approaches that have been developed in the different regions within Europe. It focuses on behavioral change in graduated students becoming practitioners, as well as on changes in mindsets and attitudes in students following the course over the past years.

- **Andre Vyt**, Artevelde University College & University of Ghent, Ghent, Belgium
- **Majda Pahor**, University of Ljubljana, Ljubljana, Slovenia
- **Tiina Tervaskanto-Mäentausta**, Oulu University of Applied Sciences, Oulu, Finland

Submitted abstract: The panel highlights inspiring and innovative approaches that have been developed in the different regions within Europe. It focuses on behavioral change in graduated students becoming practitioners, as well as on changes in mindsets and attitudes in students following the course over the past years.

In the past decades, several projects of research and development have focused on implementing effective interprofessional practice and education in health and social care. On the basis of presentations given at the three past European conferences of EIPEN, a showcase of inspiring and innovative projects is prepared. The conference chairs themselves also have developed interprofessional courses, pioneering IPE and CP in their own countries (Finland, Belgium, and Slovenia). As a panel, they will highlight original, inspiring and innovative approaches that have been developed in the different regions within Europe. They also will focus on longterm impact of IP courses, i.e., on behavioral change in graduated students becoming practitioners, as well as on changes in mindsets and attitudes in students following the course over the past years. Also changes in educational practice and academic views will be discussed. Special attention will be given to courses that combine campus-based education with clinical practice and with active involvement of other actors in the community.

Author Biographies

Andre Vyt is associate professor in human behavior and interprofessional care at Artevelde University College and University of Ghent (Belgium). He also is quality assurance officer in teacher education. After his studies in psychology and educational sciences he worked as researcher (UGhent), associated scientist (NIH, USA), lecturer, and educational innovator. He is founding partner and managing director of the PROSE expertise network in quality management, and chair of the European Interprofessional Practice & Education Network (EIPEN).

Majda Pahor is professor at the Faculty of Health Sciences (University of Ljubljana) and vice-chair of the European Interprofessional Practice & Education Network (EIPEN). She has hosted the EIPEN 2013 conference and is responsible for interprofessional learning at her faculty.

Tiina Tervaskanto-Mäentausta is lecturer at the School of Health and Social Care (Oulu University of Applied Sciences, Finland) and vice-chair of the European Interprofessional Practice & Education Network.
Network (EIPEN). She has hosted the EIPEN 2009 conference and is responsible for interprofessional learning at her faculty.

3P-1. The use of Contact Theory to Build an Interprofessional Collaborative

Oral Presentation

- **Barbara Maxwell**, A.T. Still University, Mesa, AZ, USA
- **Janet Head**, A.T. Still University, Kirksville, MO, USA
- **Jennifer Overturf**, Grand Canyon University, Phoenix, AZ, USA
- **Carolyn Glaubensklee**, A.T. Still University, Mesa, AZ, USA

Submitted abstract:
Barr (2013) highlights the need to create outcome-led, competency-based interprofessional curricula grounded in coherent, theoretical rationale. Hean, Craddock, & Hammick (2012), also stress the need to anchor interprofessional initiatives in theory. Despite such support for theoretically founded initiatives, numerous systematic reviews have demonstrated a paucity of attention directed to the theoretical underpinning of IPE activities (Reeves et al. 2010).

Contact Theory, has its origins in the work of Allport (1979) on intergroup prejudice. Allport suggested that bringing groups together was insufficient to reduce negative intergroup attitudes and stereotyping. Allport suggested several important conditions for contact which were articulated in the “Contact Hypothesis”:

- Each group in the contact situation should have equal status
- Participants should experience a cooperative atmosphere
- Members of the group should be working on common goals
- The group should have institutional support
- Group members should be made aware of group similarities and differences
- Participants should have positive expectations
- Members of the conflicting groups should perceive each other as typical representatives of their group (Allport, 1979; Hewstone & Brown, 1986).

Contact Theory has been applied to interprofessional education for health and social work students (Hewstone, Carpenter, Franklyn-Stokes, & Routh, 1994; Carpenter, 1995, Carpenter & Hewstone, 1996), and within community health services (Barnes, Carpenter, & Dickinson (2000))

This presentation describes the “Contact Hypothesis” and provides an example of how the theory was applied to the inception and development of an interprofessional collaborative consisting of faculty and patient / caregiver advocates drawn from four universities.

References


Author Biographies
Dr. Barbara Maxwell, PT, DPT, MSc, CertTHE, is Professor & University Director of Interprofessional Education & Collaboration, A.T. Still University.

Dr. Janet Head, EdD, RN, is Assistant Professor, ATSU’s Kirksville College of Osteopathic Medicine and Co-Director, ATSU-KCOM AHEC.

Jennifer Overturf, MS, RN, CNE, is Director, BSN Program at A.T. Still University, Grand Canyon University

Dr. Carolyn S. Glaubensklee, Ph.D. in Medical Science, is Associate Professor of Physiology and Chair of the Curriculum Committee for SOMA, A.T. Still University, School of Osteopathic Medicine.

3P-2. Interprofessional simulation in health education: applying the Praxis model
Oral Presentation

• Joseph Anthony, University of British Columbia, Vancouver, BC, Canada

• Lesley Bainbridge, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada

• Robert Walker, Justice Institute of British Columbia, New Westminster, BC, Canada

• John Cheng, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada

Submitted abstract:
**Background:** While simulation has become an increasingly relevant educational strategy in health care, little has been developed that is truly interprofessional. This interactive workshop will demonstrate the process used to develop an interprofessional simulation using Praxis software. We will present a simulation developed by an interprofessional group of educators focused on decision-making and communication using the example of falls in an elderly patient. The simulation is designed for entry-level health professional programs.
**Objectives:** This workshop will give participants an opportunity to experience the development of an interprofessional simulation activity, and the Praxis simulation technology. By the end of the workshop, participants will be able to describe the components of an effective interprofessional simulation as well as the developmental process.

**Method:** Praxis simulation technology is designed to deliver interactive, problem-based learning. Students gather in any number of groups in any geographic location via the Internet. Participants receive information about the case through video, audio clips and relevant real-life documentation. Responses from groups direct the learning experience for that group by determining additional information required. Groups can interact with each other or work independently. All activities are monitored and all decisions are stored to a database for review. The simulation takes place in two stages: (1) uniprofessional group work during which learners gather the information they would obtain in a real setting; and (2) interprofessional group work during which professions combine their disciplinary knowledge to develop a plan of action. A debrief session occurs between the stages and at the end of the simulation.

**Results:** Praxis has been used successfully for many years in training first responders. This pilot confirmed that application can be extended to healthcare education.

**Implications:** Praxis offers an innovative and accessible way to deliver interprofessional case-based learning.

**Author Biographies**
Joseph Anthony, PhD, P.T. is the Health Professions Education Coordinator in the Faculty of Medicine, where his work involves innovation, diffusion and evaluation of technology in the education of healthcare professionals.

Robert Walker is the Simulation Specialist at the Justice Institute of British Columbia. Robert has over 30 years’ experience in the design and development of technology based adult education, specializing in the design, and delivery of inter-professional simulation based training including the 2010 Olympic emergency exercise program. Robert was responsible for the design and development of Praxis.

Lesley Bainbridge, BSR(PT), MEd, PhD holds a master’s degree in education and an interdisciplinary doctoral degree with a focus on interprofessional health education. She is the Director, Interprofessional Education in the Faculty of Medicine and Associate Principal, College of Health Disciplines at the University of British Columbia. She has been, and is currently, principal or co-investigator on several research grants and has published in peer reviewed journals and presented at several national and international conferences on IPE.

Victoria Wood, MA has been working in the education field, focusing on interprofessional education and collaboration, for over 6 years. She has extensive experience supporting the development and delivery of interprofessional curriculum across the continuum of learning, including university-based health science education and professional development to support collaborative practice. She has published in peer reviewed journals and has presented on interprofessional education related topics at national and international conferences.

John Cheng, BBA is the Web Technology and Communications Manager at the College of Health Disciplines, where he collaborates around a diverse range of projects focussing on the convergence of
web and educational technologies. His passion is to foster technology-enhanced learning and user experience design in education.

3P-3. Learning interprofessional collaboration through simulation-based medical education: locations of action and observation

Oral Presentation

- Sofia Nyström, Linköping University, Linköping, Sweden
- Johanna Dahlberg, Linköping University, Linköping, Sweden
- Håkan Hult, Linköping University, Linköping, Sweden
- Madeleine Abrandt Dahlgren, Linköping University, Linköping, Sweden

Submitted abstract:
The global discourse of future needs for a sustainable and safe health care emphasises the necessity of enhanced interprofessional collaboration and teamwork in health care. The renewal of professional health care education is seen as an important condition for accomplishing this (Frenk et al 2010, WHO 2011). Increasing numbers of health students participate today in simulation as a part of their studies. However, due to the cost and logistics of simulation-based education, not all students can take part in the simulation activities and are instead assigned as observers of the actual simulation task. This study explores how interprofessional collaboration in a simulated acute trauma situation is enacted by participants and how these enactments are made relevant for learning through observation. Empirical data consist of standardised video recordings of 15 simulations with medical and nursing students. Practice theory (Schatzki, 2002) is used to capture the ways the socio-material arrangements of the simulated scenario enable participants to contribute different professional perspectives in their sayings and doings, and how these contribute to the emergence of interprofessional knowing in the situation. Preliminary findings suggest that interprofessional knowing in the simulation emerges through embodied and material aspects of support and in shared and distributed leadership between the students. Students who are acting as observers in the observation room, on the other hand, are directed to focus their attention on what appear as correct or incorrect professional behaviour. The emerging interprofessional knowing between the participants in the simulation room tends to get neglected in the crossing from the space of participation to the space of observation, where the instructor and students together construct interprofessional knowing differently in the effort of making the simulation activities relevant for learning. In order to explore how simulations function as learning environments, and what knowings get transferred in crossings between the different locations of action and observation, further empirical research is needed.

3P-4. Involving Patients as co-educators in Interprofessional Collaborative Practice Education

Oral Presentation

- Marie-Claude Vanier, Université de Montréal, Montréal, QC, Canada
- Vincent Dumex, Université de Montréal, Faculty of Medicine, Montréal, QC, Canada
- Isabelle Brault, Université de Montréal, Montréal, QC, Canada
- Eric Drouin, Université de Montréal, Montréal, QC, Canada

Submitted abstract:  
**Background:** Each patient will need to act as his own caregiver at some point of the evolution of his disease. As clinicians, it is our responsibility to ensure they become proficient caregivers and confident
to self-manage their health problems. As educators, we must train future health professionals to: 1) integrate patients in their own care process; 2) adapt to the different patients; 3) create a real partnership with patients and their caregivers. Patient involvement is crucial to better meet their needs and cope with growing burden of chronic diseases. University de Montreal (UdeM) envisioned a patient partner-in-care who feels part of the healthcare team and progressively assumes, at his own rhythm, his caregiver role, according to his abilities, values and life project.

Patients became key partners in our IPE curriculum and were involved in all steps of courses planning. We believe participation of patients in education must go beyond simulation or role play. Properly selected and trained patients can be paired with teachers and become co-trainers, helping students to understand patients’ world and experiences. We have successfully run 2 pilot projects and are now expanding patients’ participation in our IPE curriculum. Over the last two years, our selected patients have co-trained more than 3000 health sciences students from 12 different disciplines on the concepts of partnership in care and collaborative practice.

Objectives of the workshop:
1. Understand the concepts of patient partner-in-care and patient-as-trainer.
2. Reflect on ways to involve patients in IPE training programs.
3. Share tips with presenters to ensure success of patients’ involvement in teaching.

Methods: Workshop will be co-lead by a patient and health professionals and divided as follows: 15 minutes presentation of concepts of patient partner-in-care and patient-as-trainer, 30 minutes interactive discussion exploring ways to involve patients in IPE programs, 15 minutes presentation of UdeM experience with patients’ involvement as co-trainers and 30 minutes open discussion exploring pitfalls and key success factors for such initiatives.

Results: After completion of this workshop, participants should have a better understanding of the concept of partnership in care and envision possible ways to integrate patients in their interprofessional educational activities.

Author Biographies
Marie-Claude Vanier, B. Pharm., M.Sc., is Associate Clinical Professor at the Faculty of Pharmacy of Université de Montréal. She is chairing the Interfaculty Operational Committee developing and managing the IPE undergraduate curriculum on collaborative practice. She is also a clinical pharmacist at the Family Health Team Teaching Clinic of Cité de la Santé de Laval.

Vincent Dumez, M. Sc., is a patient living with three chronic diseases, highly trained in management and organizational transformation. He is Director of the Patient Partnership Expertise Group at the Centre for Applied Pedagogy in Health Sciences of the Faculty of Medicine of Université de Montréal.

Isabelle Brault, B.Sc.Inf., PhD, is Assistant Professor at the Faculty of Nursing of Université de Montréal. She is involved in the IPE curriculum and has co-directed a pilot project of structured interprofessional educational activities on collaborative practice and partnership during clinical placements. Her interest of research focuses on healthcare organization and transformation of professional practices.

Eric Drouin, MD, is pediatrician and gastroenterologist at the University Teaching Hospital CHU Sainte-Justine and Associate Clinical Professor at the Faculty of Medicine of Université de Montréal. He is also
Director of the MD programme and Co-Chair of the Interfaculty Operational Committee developing and managing the IPE undergraduate curriculum on collaborative practice.

Paule Lebel, MD, M.Sc., is Director of the Partnership in care section of the Centre for Applied Pedagogy in Health Sciences of the Faculty of Medicine of Université de Montréal. She is also scientific director of the Partners in Care Programme helping clinical teams from University affiliated hospitals and clinics to transform their practices toward a collaborative practice in partnership with patients and their caregivers.

3Q-1. Addressing the Need for Interdisciplinary Team Training

Oral Presentation

- Robert Kaiser, George Washington University, School of Medicine, Washington, DC, USA
- Marcos Montagnini, University of Michigan, School of Medicine, Ann Arbor, MI, USA
- Katharine Supiano, University of Utah, Salt Lake City, UT, USA
- Ruth Tsukuda, Portland VA Medical Center, Northwest Mental Illness Research Education and Clinical Center, Portland, OR, USA

Submitted abstract:

Among medical specialties, Geriatric Medicine has an established history of interdisciplinary practice and clinical education. Geriatric health professionals have long held that an interdisciplinary team (IDT) is essential in providing quality care to older adults with complex chronic health needs. IDT education is critical for health care professionals to master the knowledge and skills for effective teamwork. Higher education institutions and clinical practice settings present unique challenges for the development, implementation, and continuation of interdisciplinary geriatrics team training programs. Despite calls for the expansion of such programs, significant barriers remain to their long-term success, including, (1) factors related to each profession and its unique cultural and historical background, power base, and willingness to embrace change, (2) factors related to interrelationships among the professions, including their status, ability and willingness to collaborate to achieve improved health care quality and outcomes, (3) factors related to the context for IDT education, including acute, long term, and community care settings, and (4) the necessity of obtaining sustained institutional and administrative support.

The Partnership for Health in Aging (PHA), a coalition of 35 gerontological health professional associations and organizations, recently released a position statement calling for the development and expansion of IDT education. This panel reviews the PHA findings and recommendations and their implications for developing, implementing, and sustaining IDT training in educational and clinical settings. The first panelist (Montagnini) will present the statement’s major conclusions and recommendations. The second panelist (Kaiser) will describe successful models of IDT training that have been developed and implemented. The third panelist (Supiano) will identify the challenges in designing IDT training programs in educational and practice settings. The fourth panelist (Tsukuda) will provide analysis and commentary of these three presentations, just prior to the discussion period. Recommendations for developing, implementing, and sustaining IDT education and practice to meet future health care needs will be discussed. Recommendations from the Partnership for Health in Aging-Interdisciplinary Team Training Task Force have implications for a variety of health care specialties. This panel is intended for clinicians, educators, and administrators of all professional disciplines involved in the care of complex patients.
Author Biographies
Robert Kaiser, MD, MHSc, FACP is Associate Director, Fellowship in Geriatric Medicine, and Associate Professor of Medicine, George Washington University School of Medicine; Attending Physician in Geriatrics and Extended Care and Medical Director of the Home Based Primary Care Program, Washington, D.C. Veterans Affairs Medical Center; and Co-Chair of the PHA Workgroup on Interdisciplinary Team Training.

Marcos Montagnini, MD is Professor of Internal Medicine in the Division of Geriatrics and Palliative Medicine and Director, Hospice and Palliative Medicine Fellowship Program at University of Michigan; Director, Palliative Care Program, VA Ann Arbor Healthcare System; and Chair of the PHA Workgroup on Interdisciplinary Team Training.

Kathie Supiano, PhD, LCSW, FGSA, FT, is an Associate Professor-University of Utah College of Nursing. She teaches Interdisciplinary Approaches to Palliative Care for graduate students in Pharmacy, Social Work and Nursing, and in the Interprofessional Education Program. She is a Fellow in the Gerontological Society of America, a Fellow of Thanatology, a founding member of the Social Work Hospice and Palliative Care Network, and was a member of the PHA Workgroup on Interdisciplinary Team Training.

Ruth Tsukuda EdD, MPH, RN, is Associate Director of Education at the Northwest Mental Illness Research, Education and Clinical Center, Portland VA Medical Center. Dr. Tsukuda was a member of the PHA Workgroup on Interdisciplinary Team Training and a leader in the design and implementation of interdisciplinary team training in the VA Healthcare System.

3Q-2. Debriefing teams on the What and the Why of expert teamwork

Oral Presentation

- Moshe Feldman, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- Deborah DiazGranados, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- Nital Appelbaum, Virginia Commonwealth University, Richmond, VA, USA

Submitted abstract:
Background: Debriefing interprofessional healthcare teams remains a challenge in medical education and practice. Guided Team Self Correction (GTSC) is a structured debriefing model designed to develop the capability of team members to self-diagnose and correct their own team and task performance using specific performance behavior examples derived from simulated or real task scenarios. 1 GTSC incorporates many common debriefing techniques such as creating a positive learning environment, providing process oriented feedback, and eliciting active participation from team members. 2-4 It is unique to other debriefing models in how it emphasizes limited facilitator driven feedback, the use of an expert model of teamwork to guide discussion, ‘trigger events’ to limit workload associated with memory retrieval, and explicitly balancing positive and negative behavioral examples of performance. GTSC incorporates an expert model of teamwork derived from research on command and control Navy Teams and later adapted for healthcare. The model delineates four core dimensions of teamwork: leadership/followership, communication, supporting behavior, and situation monitoring. 5 GTSC is a flexible debrief approach for education and practice.

Objectives:
1. Describe the GTSC model
2. Discuss barriers to implementation and strategies to overcome barriers
3. Implement and facilitate GTSC debriefing sessions

**Method:**
A. Introduction to GTSC (20 minutes): Session faculty will give an interactive didactic lecture on the core debrief strategies employed by the GTSC model and the foundational research from which the 4 dimensional expert model of teamwork was derived. Session participants will be asked to share their experiences with different teamwork training models, debriefings, and settings in which they work.
B. Practicing GTSC (30 minutes): Session participants will observe a 5 minute video of an interprofessional healthcare team responding to a simulated acute clinical scenario. Participants will form small groups and practice debriefing the scenario using the GTSC approach. Session faculty will facilitate and guide teams during their debriefing sessions. A group discussion to review perceptions and challenges using the GTSC debrief model and tools will follow.
C. Overcoming barriers for debriefing in educational and practice settings using GTSC (15 minutes): Session faculty will present some common barriers for applying GTSC and specific examples of how GTSC is being used in a variety of settings at the VCU School of Medicine and Health System.
D. Identifying barriers & implementation strategies for success (25 minutes): Participants will again form their groups, identify barriers for implementing GTSC in their organizations, and discuss strategies to overcome barriers. The session will conclude with a discussion of barriers and strategies to leverage institutional and local resources to better integrate GTSC at their home institution.

**Results:** This workshop is intended for educators, researchers, and practitioners interested in implementing teamwork debriefs post-trainings or clinical events. Participants will be able to add the GTSC model to their toolbox and gain strategies for overcoming organizational barriers to implementation.

**Implications:** The large focus on organizational barriers (e.g., facilitator training, time, motivation to debrief, etc.) in debriefing exercises and how these barriers can be addressed will empower attendees to translate theory into practice at their own institutions.

**References**
Author Biographies

Dr. Moshe Feldman is an Assistant Professor at the Virginia Commonwealth University School of Medicine and Assistant Director for Research and Evaluation at the Center for Human Simulation and Patient Safety. Dr. Feldman has 10 years of experience developing simulation based training and assessments for healthcare, military, industry, and workforce development. His current work focuses on quality improvement and human systems integration in support of patient safety.

Deborah DiazGranados received her PhD in Industrial and Organizational Psychology from the University of Central Florida. Her expertise includes teams, team leadership, collaboration and understanding the implications of diversity on team effectiveness. Debbie’s research has been published in major peer-reviewed journals as Journal of Applied Psychology, Academic Medicine, Current Directions in Psychological Science and The Joint Commission Journal on Quality and Patient Safety.

Nital Appelbaum is currently a research assistant at Virginia Commonwealth University School of Medicine’s Office of Assessment and Evaluation Studies. In the past, she worked as a Measurement Specialist for the Department of Veterans Affairs evaluating the effectiveness of training programs for healthcare practitioners throughout the Employee Education System. She is completing her doctorate in Industrial and Organizational Psychology with a focus in healthcare team functioning, psychological safety, and leadership.

3Q-3. Inter-Institutional Interprofessional Education: Using Team Based Learning with Diverse Learners from Different Institutions

Oral Presentation

- Christine Patel, St. Petersburg College, Pinellas Park, FL, USA
- Erik Black, University of Florida, Gainesville, FL, USA
- Amy Blue, University of Florida, Gainesville, FL, USA

Submitted abstract:

Background: Many health science center colleges are geographically diverse or have satellite programs located at a distance from a main campus. During the 2013-2014 academic year, in order to provide a comprehensive interprofessional education that allows for the satisfaction of accreditation, the University of Florida and St Petersburg College partnered to facilitate effective IPE. Participants included University of Florida Pharmacy students and students enrolled in the dental hygiene, radiation technology, orthotics and prosthetics and respiratory technology programs at St Petersburg College. Faculty from both colleges collaboratively implemented a team-based learning curriculum to introduce groups of interprofessional learners to concepts of patient safety and clinical ethics.

Objective: To assess the effectiveness of inter-institutional interprofessional TBL for knowledge acquisition, this study examined students’ knowledge-based performance.

Methods: Students from five different degree programs (n=121) participated in two half-day learning experiences, each focused on a specific topic. To assess content knowledge at each session, students completed an individual readiness assurance test and then as a group, a team-based readiness assurance test; items were the same items on each test.

Results: Individual student knowledge performance ranged from 45%-69% correct (mean 52%). In concordance with TBL methodology, team scores were statistically significantly higher than individual.
scores, ranging from 59-100% correct (mean 83%). The majority of two-year programs outperformed the four year graduate level program.

**Implications:** Results suggest developing relationships with other institutions can be an effective means of educating interprofessional groups of learners around specific content areas and complying with accreditation requirements. Results also suggest that it is appropriate for students at all levels of education (two-year, undergraduate and graduate) to participate in IPE using a common curriculum.

**3R-1. Activity Driven Delivery of an Interprofessional Leadership Curriculum Through use of Electronic Health Records**

*Oral Presentation*

- David Trinkle, Virginia Tech Carilion, School of Medicine, Roanoke, VA, USA
- Jeannie Garber, Jefferson College of Health Sciences and Virginia Tech Carilion School of Medicine, Roanoke, VA, USA
- Wilton Kennedy, Jefferson College of Health Sciences & Virginia Tech Carilion School of Medicine, Roanoke, VA, USA
- Jennifer Page, Virginia Tech Carilion, School of Medicine, Roanoke, VA, USA

**Submitted abstract:**

Background and Objective: In 2009, the Virginia Tech Carilion School of Medicine opened its doors to its inaugural class. Prior to opening, a unique curriculum was developed for a small class (42 students) centered around four over-arching content domains (basic science, clinical science, research, interprofessionalism). A collaborative team with our nearby Jefferson College of Health Sciences, in particular the nursing and physician assistant programs was formed to develop a unique interprofessional curriculum. There were many hurdles to overcome, not the least of which were differing academic calendars. A year-long Interprofessional Leadership (IPL) curriculum was developed which included first year medical students, first year physician assistant students, and senior nursing students focusing on objectives and activities dealing with healthcare teamwork, professional roles, scopes of practice, communication techniques, leadership and followership; many of which correlate with the Interprofessional Education Collaborative (IPEC) core competencies. One newly-implemented activity is the inclusion of the Student Review of InterProfessional Teams (SCRIPT) process into the IPL curriculum. Interprofessional teams review live, real time patient records with “read only” access to our electronic health record system (EHR). The patients have been deemed as high risk, high utilization COPD patients with frequent contact with the healthcare system. The students do not focus on clinical findings and topics but rather on communication, leadership, composition of the healthcare team, conflict resolution, and other objectives that role up to IPEC core competencies. Emphasis is placed on health profession roles, the varying ways they document patient data, their scopes of practice, communication between providers, the roles of the patient and family as part of the team, and the impact of the EHR (positive and negative) on team communication. Specifics involving EHRs are also covered such as co-signing notes, level of access, one profession starting notes for another profession, the relationship between notes and problem lists, e-prescribing, patient centered home concepts, protocols, and meaningful use objectives among others. Students have a "run" at the chart for about three weeks at a time, four times throughout the year. During the review, the teams use a problem-based (PBL) approach to create objectives and then teach each other the objectives the following week. The faculty developed weekly objectives that the group’s facilitator uses to direct students in their learning activities. This
session will focus on the development of SCRIPT as an interprofessional activity within an interprofessional course.

**Author Biographies**

Dave Trinkle, M.D., FAPA is currently Associate Dean of Community and Culture, Associate Professor of Psychiatric Medicine, and Program Director of the Geriatric Psychiatry Fellowship Program at Carilion Clinic and the Virginia Tech Carilion School of Medicine (VTCSOM). He is also an Associate Professor with the University Of Virginia School Of Medicine and Via College of Osteopathic Medicine. He is the Geropsychiatric Consultant to the Geriatric Assessment Clinic at Carilion Clinic Center for Healthy Aging, the League of Older Americans, and to numerous Nursing Homes in the Roanoke Valley. He helped develop and lead the Carilion Center for Healthy Aging, a multidisciplinary team based center for geriatric patients and their families, where he is based and continues to actively see and consult patients.

Jeannie Scruggs Garber, DNP, RN, NEA-BC An Assistant Professor of Nursing and the Department of Interprofessionalism at Jefferson College of Health Sciences and Virginia Tech Carilion School of Medicine. Dr. Garber has over 30 years of clinical, administrative and higher education experience. Her research line of inquiry is focused on interprofessional teamwork skills and behaviors and how these behaviors impact quality, patient safety and clinical outcomes.

Wilton Kennedy, DHSc., PA-C Wilton Kennedy attended Emory University Physician Assistant Program in Atlanta Georgia. Before joining the faculty at JCHS, he practiced primary care for 7 years at Blue Ridge Community Health Center, a migrant and community health center in Hendersonville, N.C. Dr. Kennedy has a strong interest in community health, interprofessional education, global health, and the underserved. He chaired the Physician Assistant Education Association’s Task Force on Interprofessional Education. He currently works in the Emergency Department

Richard C. Vari, Ph.D. Dr. Vari has been the Founding Associate Dean for Medical Education at the Virginia Tech Carilion School of Medicine (VTCSOM) in Roanoke, VA., since April 1, 2008. He has been heavily involved in curriculum design, management, and student assessment during a 20-year career in medical education. At VTCSOM he also directed the development of a four-year longitudinal curriculum in interprofessionalism healthcare education and served as the Founding Chair of the Department of Interprofessionalism for two years.

**3R-2. Health Professional Education Quality (HPEQ) Project Initiatives in Promoting Interprofessional Education and Collaborative Practice in Indonesia**

**Oral Presentation**

- **Samuel Josafat Olam**, Universitas Indonesia, Indonesian Young Health Professionals’ Society, Jakarta, Indonesia
- **Lhuri Dwianti Rahmartani**, Universitas Indonesia, Indonesian Young Health Professionals’ Society, Jakarta, Indonesia
- **Aprilia Ekawati Utami**, Ministry of Education and Culture, Jakarta, Indonesia

**Submitted abstract:**
The concept of interprofessional education (IPE) has never been well-recognized by Indonesian health professionals until year 2011, during the conference held by Health Professional Education Quality
(HPEQ) Project. It was attended by over 1200 participants nationwide from medical, dentistry, nursing, midwifery, nutrition science, pharmacy, and public health backgrounds.

HPEQ Project is a collaborative 5-year program of the Indonesian Ministry of Education and Culture with World Bank, whose primary aim is to improve the quality of health professional education in Indonesia through accreditation, competency standardization, capacity building, and partnership among institutions. Also in 2011, HPEQ Project supported a national study on students' perception towards IPE, initiated by the alliance of health professional student organizations later known as HPEQ Student. HPEQ Student, which focuses on interprofessional collaboration and students’ participation in health professional education system, was established in 2010 under the initiatives of student organizations from seven health professional backgrounds across Indonesia. Currently, HPEQ Student has generated a number of interprofessional activities, such as the study on students' perception and readiness towards IPE, study on students' and teachers' opinion on an ideal IPE model, exposing IPE to students through student-friendly media (e.g. book, website, and social media), and simulation of interprofessional case discussion. HPEQ Project also financially supported them to attend and present the result of their study at ATBHI VI.

Following the success of youth spirit-led HPEQ Student, a similar movement is formed under the name of Indonesian Young Health Professionals’ Society (IYHPS). It serves as the community for young health professionals, ranging from the recently graduated up to 35 years of age. It is planned to launch in early 2014 with focus on collaborative work-based community service and research on IPE. The activities stated above showed government’s and stakeholders’ commitment and support in promoting IPE and collaborative practice in Indonesia.

Author Biographies
SAMUEL JOSAFAT OLAM graduated as a medical doctor in 2010 from Faculty of Medicine, University of Indonesia. He is working as contractual partner for the WHO Country Office for Indonesia and is contributor for Ministry of Education and Culture, under the HPEQ Project.

LHURI DWIANTO RAHMARTANI holds a Bachelor of Medical Science from the University of Melbourne and acquired her MD from University of Indonesia in 2011. She is currently a master student in Faculty of Public Health, University of Indonesia, is working as contractual partner for the WHO Country Office for Indonesia and is contributor for Ministry of Education and Culture, under the HPEQ Project.

APRILIA EKAWATI UTAMI works for Directorate General of Higher Education, Indonesian Ministry of Education and Culture, as Monitoring and Evaluation staff in the HPEQ Project.

3R-3. Teaching Health and Aging Using an Interprofessional Lens: A Curriculum for Health Professions Educators
Oral Presentation
- Stacey Pinnock, Nova Southeastern University, College of Osteopathic Medicine, Ft. Lauderdale, FL, USA
- Cecilia Rokusek, Nova Southeastern University, College of Osteopathic Medicine, Ft. Lauderdale, FL, USA

Submitted abstract:
Objectives:
1. Describe the curricular design of an interprofessional leadership program in geriatric education for health educators
2. Describe the individual components of this curriculum
3. Discuss dissemination strategies of this curriculum and both the successes and challenges of face to face versus online dissemination.

Interprofessional collaboration is a necessity in patient-centered health care, and has been noted to increase health outcomes of patients. The growing number of elderly with chronic conditions will make coordinated care even more important over time. In order to ensure future health care professionals are well equipped to provide care to the aging population in a collaborative manner, faculty must have the knowledge and skills of interprofessional collaborative practice to steer students in the right direction.

The Interprofessional Leadership in Geriatric Education (ILGE) faculty development program has four foundational program goals:

1. Provide ongoing geriatric education programs for health professions faculty in the Health Professions Division (HPD), Psychology, and other related geriatric disciplines targeted on preparing a geriatric workforce in the 21st century;
2. Integrate the concept of interprofessional geriatric practice in curriculum;
3. Introduce faculty to the latest in teaching methods and technologies to enhance teaching skills and effectiveness in geriatric education;
4. Foster interprofessional knowledge and skills in teaching, service and research.

This interprofessional faculty development program utilizes a blended learning approach to reach a number of health professionals who have varying schedules. Methods of instructional delivery include in-person and online didactic sessions, online case studies, simulation lab involvement, and reflective journaling. The program is innovative in incorporating the May 2011 Core Competencies for Interprofessional Collaborative Practice.

This session will discuss the development and implementation of the Interprofessional Leadership Program in Geriatric Education, including curricular design and the structure of the syllabus. Lessons learned from the pilot of this program, and future plans will also be addressed. Participants will preview components of the online learning modules, and will receive copies of the syllabus for their reference.


*Oral Presentation*

- **Keiko Abe**, Nagoya University, Graduate School of Medicine, Nagoya, Aichi, Japan
- **Sundari Joseph**, Robert Gordon University, Aberdeen, Scotland, UK
- **Hyun-Jeong Park**, Sendai University, Sendai, Japan
- **Lesley Diack**, Robert Gordon University, Aberdeen, Scotland, UK

**Submitted abstract:**

_Branch: Delivering sustainable health care in countries with disparate communities can be challenging and frustrating. However this project using game playing, enabled academics in the UK and Japan to collaborate with each other so that graduates of the future will develop global perspectives in interprofessional health and social care. Concurring with the Global Health Workforce Alliance (WHO) that in today’s joined up world health and education are interconnected and interdependent the project aimed to internationalise the interprofessional curriculum for health and social care graduates in order_
to deliver effective and safe health care for the future. Phase 1 of the project involved the use of the Interprofessional Education game (IPEG), developed with collaboration between colleagues from the two Aberdeen universities. Preliminary discussions occurred in Kobe, Japan during the All Together Better Health VI and the project commenced in 2013. The workshop will be split into 5 sections and will include some general information on gaming and its use in IPE but will also introduce the participants to the iPEG game, allow them to play it and then reflect on its possible uses.

**Methods:**
- Introduction (15 minutes)
- Highlight the uses of gaming for IPE especially the use of iPEG (15 minutes)
- Play the game in interprofessional groups (30 minutes)
- Reflect on the potential for use in their Universities and courses
- Discuss the good and bad points of game playing for IPE (15 minutes)

This presentation will enable participants from any health and social care background to explore gaming in interprofessional education (IPE). Participants will be encouraged to play the iPEG game, similar to Monopoly it enables players to grasp the intricacies of different professional roles and responsibilities. The aim is to foster respect and to break down stereotypes by writing, drawing, miming, and role playing scenarios.

**Results:** Findings from Phase 1 of this funded transcultural Japanese-Scottish project will be presented during the workshop. This project evaluated the experiences of students and facilitators playing iPEG in IPE programmes within universities in Aberdeen, Scotland (n=3000 approx); Nagoya and Sendai (n=300) Japan. Participants will be encouraged to discuss the use of gaming in IPE settings and develop ideas and concepts for creative and innovative learning.

**Implications:** The project will help an international community of educators in IPE to further understand how to create innovative education redesign to provide a collaboration ready healthcare workforce. The next generation of health professionals will require more flexibility in their work practice, thinking collaboratively, and very differently. They have to look beyond traditional role boundaries and conformity. Education for our undergraduates needs to be more robust and innovative to address this. Health professionals learning together and understanding each other is the way forward and has been proven by the research evidence from both countries involved in this project.

3S-1. The advancement of IPC in Long-term Care

**Oral Presentation**
- **Kelly Lackie**, RN Professional Development Centre, Halifax, NS, Canada
- **Valerie Banfield**, RN Professional Development Centre, Halifax, NS, Canada
- **Kathy Snow**, Northwoodcare Incorporated, Halifax, NS, Canada
- **Jennifer Tucker**, Northwoodcare Incorporated, Halifax, NS, Canada
- **Darlene Rogers**, Northwoodcare Incorporated, Halifax, NS, Canada

**Submitted abstract:**

**Background:** The advancement of interprofessional collaborative practice (IPC) in long-term care (LTC) is relatively new in Nova Scotia. Senior leadership in one LTC facility recognized the need for care delivery to move from a siloed approach to one that was more inclusive and collaborative. With the goal of advancing IPC as the new model of care, senior leadership consulted with provincial interprofessional
(IP) facilitators to develop an interprofessional education (IPE) action plan for a designated demonstration unit (DU).

**Methods:** The initial phase of the project included IP facilitator development training for identified IP champions from 17 care units across the LTC facility. In the second phase, the provincial IP facilitators designed five short and easily accessible IPE offerings for all HCPs on the DU. Each session was delivered twice so that the all HCPs could attend. The first was facilitated by the provincial IP facilitators, while the second was facilitated by the newly developed LTC IP facilitators thereby building capacity for future IPE offerings throughout the LTC setting.

**Results:** The IPE sessions evolved over a nine month period enabling the majority of HCPs on the DU to attend the sessions. Initial evaluations focussed on HCPs’ reaction to the sessions and revealed a high degree of satisfaction and understanding of the concepts taught. Results from a nine month follow-up evaluation, which focuses on HCPs’ ability to transfer IP learning to the practice setting and identification of support practices within the organization, is pending and will be available for presentation.

**Implications:** Learning with, from and about other HCPs is the foundation of IPC teams. Beyond laying this foundation, capacity building of HCPs and IP facilitators is important to the sustainability of IPC. In this project, IP was made realistic in the practice setting and IP facilitators were developed and mentoring.

**3S-2. Utilizing a Strategic Planning Oversight Committee to Improve Patient Outcomes in the Geriatric Population**

*Oral Presentation*

- **Jill Young-Hague**, Magee Women’s Hospital of UPMC, Pittsburgh, PA, USA
- **Neil M. Resnick**, University of Pittsburgh / UPMC, Pittsburgh, PA, USA
- **Colleen Tanner**, Magee Women’s Hospital of UPMC, Pittsburgh, PA, USA

**Submitted abstract:**
Three years ago, the Geriatrics Division transferred its inpatient service to Magee-Women’s Hospital of UPMC. Although historically known for its services for women (OB/Gyn and Oncology), Magee has expanded in the last six years to include general medical patients. To facilitate the addition of geriatrics, a Strategic Planning Oversight Committee (SPOC) was formed, co-chaired by a Geriatric Physician Champion and an Administrative Nursing Director, with additional representation from nursing, medicine, education, case management, nutrition, physical and occupational therapy, speech, pharmacy, social work, information services, and quality.

The SPOC meets monthly to address: operational issues, such as development of a geriatric admission order set and a multidisciplinary clinical dashboard; clinical care issues such as refining our nursing assessment, developing and implementing a bedside swallowing evaluation, devising ways to reduce both falls and sitter usage, and ensuring earlier and more frequent ambulation of patients. Geriatric education has involved sensitivity training for all hospital staff, bedside nursing and nursing assistant training to include yearly competencies, and development of delirium video vignettes to demonstrate prevention and management strategies for this devastating condition as well as its early identification. Meetings have also provided a forum to present new initiatives, celebrate success, brainstorm barriers, identify collaborative opportunities, and inspire each other.
For the three years, we have not only maintained a lower length of stay, readmission rate, and cost for older patients on our geriatrics service but also for those on our other medical services, which supports a true “systems” effect.

Because the SPOC spearheads interprofessional efforts at the administrative level, and provides disciplines with “top-down” support for collaboration, we have been able to move interdisciplinary care forward in a systematic and cohesive fashion. Significantly, SPOC should be replicable by other hospitals.

3S-3. Interprofessional workplace-based training in nursing homes

Oral Presentation

- Reidun Kjome, University of Bergen, Centre for Pharmacy, Bergen, Norway
- Sissel J. Brenna, Bergen University College, Department of Health and Social Sciences, Bergen, Norway
- Anders Bærheim, University of Bergen, Centre for Pharmacy/Department of Global Health and Primary Care, Bergen, Norway

Submitted abstract:

**Background:** Today’s healthcare is complex and requires multifaceted professional cooperation in order to give patients the best care. Many didactical pathways have been developed to support health students in learning interprofessional work, but few have been based in primary care. In 2012 scholars from the health educations at the University of Bergen and Bergen University College assembled to discuss the possibility of a work place based interprofessional education initiative. The group agreed to establish a Centre for Interprofessional Workplace Learning in Primary Care (TVEPS).

**Objectives:** To create a workplace-based interprofessional learning activity in primary care for a broad range of health care students.

**Methods:** Final-year health care students are divided in mixed groups of four. Students are introduced to their group and asked to plan a joint examination of short-term patients in a nursing home setting, with the purpose of creating a treatment plan. The following week the students visit the nursing home, and examine two allocated patients, then write a report describing the patients’ health status, including their recommendations for improvements in care. Within the next week the report is presented to and discussed with the nursing home staff responsible for the patient. After completing the activity, students write a short text reflecting on their learning experience.

**Results:** Students report that having to represent their profession in interprofessional groups gives them more confidence, and that the group work leads to reflections on their own professional role, and awareness of other professions’ capabilities. The activity is also highly valued by participating nursing homes and patients.

**Implications:** The program is easy to implement, and requires little involvement from teaching staff. Other primary care settings have been explored, and will be developed further. Further research is needed to determine whether this experience also facilitates future interdisciplinary work.

**Author Biographies**
Reidun L. S. Kjome holds a post-doctorate position in the research group in social pharmacy at the University of Bergen (UiB). Her work in the “real world” has been interdisciplinary: first in nursing homes and home-based services, and later at the Norwegian Porphyria Centre. Besides her newfound interest in interprofessional learning, her research interests include diabetes, quality assurance, porphyria, and nursing home medicine.

Sissel Johansson Brenna is an assistant professor at Bergen University College (BUC), Faculty of Nursing. Her main work has for several years been to develop and to coordinate Interprofessional Education- and Learning programs in Department of Health and Social Sciences at BUC.

Anders Bærheim is a professor in Family Medicine at the University of Bergen. He is leading the Centre for Interprofessional Workplace Learning in Primary Care (TVEPS). His research has lately mainly focused on medical education.

**3S-4. Involving older people in the development of technology enabled geriatric assessment and monitoring in the community and home**

*Oral Presentation*

- **Kelly Kay**, Regional Specialized Geriatric Services, Cobourg, ON, Canada
- **Brenda Gamble**, University of Ontario Institute of Technology, Oshawa, ON, Canada

**Submitted abstract:**

**Background:** Health policy in Canada supports healthy aging at home and in the community. Specialized geriatric assessment services are generally centralized and frequently require frail seniors to travel for assessment and follow-up visits. Technology enabled interprofessional assessments and follow-up in the home or local community will enable more frail seniors to receive timely assessment, intervention and follow-up by overcoming barriers. Timely comprehensive geriatric assessment has been demonstrated to support the development of holistic care plans that provide the best opportunity for seniors to maintain their independence and function.

**Objectives:** To explore the use and limits of technology to facilitate in-home and/or community-based interprofessional comprehensive geriatric assessment (CGA) and follow-up/monitoring of community-dwelling frail seniors.

**Methods:** In 2006, Ontario’s government implemented regionalized healthcare services and created 14 Local Health Integration Networks (LHINs). Each LHIN is responsible for the planning, integration and funding of specified health services in their region, including hospitals, community and home care. Similar to other regions in Canada the number of seniors experiencing frailty (e.g. multiple co-morbidities, high health service utilization etc.) is increasing in Ontario’s Central East LHIN.

Data collection includes participatory observations, focus groups, and interviews with seniors, and healthcare and social services workers in the Central East LHIN to identify and evaluate technology for geriatric assessment.

**Results and Implications:** We will report on the first stage of the study which will be completed March 2014. Working collaboratively with field experts and others we will identify technology for health assessment and monitoring. The evaluation of technology options will be based on a literature review and interviews/focus groups with seniors to ascertain the functionality of the tools. The evaluation of
the technology will be based on the views of seniors and health and social workers and can inform health service design for community dwelling frail seniors.

4A. Using Simulation to Enhance Preclinical Interprofessional Education Programs

Workshop

Program abstract: An IPE team of healthcare professionals has developed several preclinical training modules utilizing Standardized Patients (SPs) to offer authentic IPE sessions to learners across four colleges. In an effort to share this experience, the authors will walk course participants through the maze of developing IPE modules that are adaptable to a variety of settings and healthcare professions. Participants in the workshop will develop an SP case scenario, incorporating one or more of the IPEC competencies, to utilize at their home institution.

- Dawn Schocken, University of Southern Florida Health, Tampa, FL, USA
- Amy Schwartz, University of Southern Florida Health, Tampa, FL, USA
- Rita D’Aoust, University of Southern Florida College of Nursing, Tampa, FL, USA

Submitted abstract:

Background: Healthcare is undergoing a comprehensive paradigm shift to Interprofessional team-based practice. Most of our accrediting bodies are requiring that we embed authentic Interprofessional education (IPE) into the trainee curriculum.

An IPE team of healthcare professionals has developed several preclinical training modules utilizing Standardized Patients (SPs) to offer authentic IPE sessions to learners across four colleges. Each module incorporates one or more of the IPEC competencies. To date, six modules have been completed and incorporated into the first two years of preclinical learning in medicine, pharmacy, physical therapy, nursing and athletic training. Evaluations have shown the learners’ gain an appreciation of their team members’ skills and competencies and increased communications across these disciplines have been noted both in and out of the classroom.

In an effort to share this experience, the authors will walk course participants through the maze of developing IPE modules that are adaptable to a variety of settings and healthcare professions. Participants in the workshop will develop an SP case scenario, incorporating one or more of the IPEC competencies, to utilize at their home institution.

Objectives: Participants who attend this workshop will be able to:

1. Develop a case scenario for an IPE session with preclinical learners at their home institution.
2. Demonstrate clear objectives to incorporate case into preclinical curriculum at their home institution.
3. Discuss methods to train SPs to address the needs of various healthcare programs.
4. Analyze methods of evaluation to determine the effectiveness to meet the IPEC Competencies.

Methods: The IPE faculty plans to utilize small group sessions, large group discussion, role playing/modeling and simulation to establish the effectiveness of the case scenarios developed.

Format: Outline of Workshop Session:

1. Introduction of the Session - 5 minutes - Discussion
2. II. Overview of the IPEC Competencies - 5 minutes - Group Discussion
3. Participant’s development of case scenario - 20 minutes - small groups
4. Development of training methodology for SPs - 10 minutes - small groups
5. Role play of the cases to large group - 20 minutes - each small group
6. Feedback Session - 15 minutes in large group
7. Wrap up / discussions - 15 minutes - large group discussions

**Learning Activities:** This session will utilize the following learning activities –
- Content demonstration
- Large and small group discussion
- Feedback and evaluation

**Enduring Materials:** At the end of the workshop, each participant will be given a copy of their own adapted IPE preclinical outpatient curriculum adapted for their home setting. This unique IPE curriculum is founded on the core competencies as outlined by IPEC and includes cases, tools, and learning activities and outcomes evaluation that can be used by the participants in their home institution.

**Author Biographies**
Dawn M Schocken is Director of Center for Advanced Clinical Learning, USF Health Morsani College of Medicine, Tampa, Florida. She directs the very busy simulation center at Morsani College of Medicine providing training and assessments for medical students, nursing students, physical therapy students, pharmacy students and athletic training students. Her particular areas of research interests include medical errors, assessments done with hybrid simulations (integrating high-fidelity simulators with SPs), and integration of simulation into medical education.

**4B. Transforming health systems through collaborative leadership: Catalyzing Change!**

**Workshop**

**Program abstract:** Collaborative leadership is one of the key competencies for effective collaboration at senior levels of the health system. This workshop traces the work of the Canadian Interprofessional Health Leadership Collaborative and explores concepts of collaborative leadership including how we can best teach it.
- Lesley Bainbridge, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- Sarita Verma, University of Toronto, Toronto, ON, Canada
- Maria Tassone, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada

**Submitted abstract:**

**Background:** The Canadian Interprofessional Health Leadership Collaborative (CIHLC) is a multi-institutional partnership that is led by the University of Toronto, Canada and includes the University of British Columbia, the Northern Ontario School of Medicine, Queen’s University and Université Laval. The goal of the CIHLC is to develop, evaluate and disseminate an evidence-based collaborative leadership program targeted to health care leaders. Chosen by the U.S. Institute of Medicine’s (IOM) Board on Global Health as one of four innovation collaboratives around the world tasked with incubating and piloting health professions education reform called for by the Lancet Commission Report, the CIHLC’s vision is “collaborative leadership for health system change to globally transform education and health”.

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**Objectives:** Attendees will:
- learn about the evidence that supports collaborative leadership as a way of building high-performing and sustainable health systems;
- examine the definitions and descriptions of collaborative leadership;
- engage in discussions about what learning about collaborative leadership means, including the concepts of community engagement and social accountability;
- identify evaluation metrics that can measure structure, process and outcomes associated with collaborative leadership training.

**Methods:** (1) A panel presentation related to working definitions, learning approaches, and an evaluation framework related to collaborative leadership; (2) Small group discussions about definitions and descriptions of collaborative leadership and its unique elements; (3) Large group discussion about the key elements; (4) Small group identification of teaching strategies that focus on collaborative leadership at a high level; (5)

**Results:** Anticipated learning outcomes include: (1) participants can identify the synergies, linkages and differences between change leadership and collaborative leadership. (2) Application of their newly acquired knowledge of collaborative leadership in relationship to inter professional learning and practice using community engagement, grounded principles of social accountability.

**Implications:** The blending of concepts and understandings of existing leadership development, inter professional in nature, with the creativity of integrated collaborative leadership skills has the potential to pave new pathways for high level emerging health professional leaders who embrace community engagement and social accountability as a way of being.

**Author Biographies**
Lesley Bainbridge, BSR9PT), MEd, PhD is the Director, Interprofessional Education in the Faculty of Medicine and Associate Principal, College of Health Disciplines at the University of British Columbia. Dr. Bainbridge has been, and is currently, principal or co-investigator on several research grants and has published in peer reviewed journals and presented at several national and international conferences on various aspects of IPE.

Dr. Sarita Verma, LLB, MD, CCFP is a Professor in Family Medicine, Deputy Dean and Associate Vice Provost HPE at the University of Toronto. She completed her medical degree at McMaster University. Dr. Verma is the recipient of the Donald Wilson Award in medical education and co-recipient of the May Cohen Gender Equity Award. She is the Co-lead for the Canadian Interprofessional Health Leadership Collaborative at the IOM’s Global Forum on Innovation in Health Professions Education.

Maria Tassone is the inaugural Director of the Centre for Interprofessional Education, University of Toronto (UofT), and the Senior Director, Interprofessional Education and Practice at the University Health Network. She is an Assistant Professor in the Department of Physical Therapy, Faculty of Medicine, UofT. Maria’s leadership roles and scholarly work in education and health care have focused on the integration of practice, education and research, as well as leading change in complex systems.
4C. Interprofessional Professionalism: I Know It When I See It!

**Workshop**

**Program abstract:** Participants will develop observable interprofessional professionalism (IPP) behaviors, apply IPP behaviors to a case vignette, and analyze personal challenges in creating assessment tools. Presenters will define IPP, describe behaviors used in the interprofessional professionalism assessment (IPA), and share challenges and lessons learned in developing the IPA using complex research methodology.

- **Jody Frost,** American Physical Therapy Association (APTA), Alexandria, VA, USA
- **Jennifer Adams,** American Association of Colleges of Pharmacy (AACP), Alexandria, VA, USA
- **Anthony Palatta,** American Dental Education Association (ADEA), Washington, DC, USA
- **John Tegzes,** Western University of Health Sciences, Pomona, CA, USA

**Submitted abstract:**

**Objectives:**

By the end of this session, the participant will...

1. Develop a listing of several observable behaviors that reflect an interprofessional professionalism assessment category.
2. Identify and assess interprofessional professionalism behaviors evidenced in a case vignette role play situation.
3. Describe the construct of interprofessional professionalism.
4. Analyze their personal challenges in creating a new assessment tool.
5. Explain the challenges and lessons learned in creating the new interprofessional professionalism assessment tool using a complex research methodology.

**Background:** Interprofessional health professions’ education and continuing education environments where students and/or professionals representing multiple health professions learn with and from each other are considered key ways to achieving effective collaborative practice, an integral component of future healthcare delivery models (IOM 2001, 2003, 2009, 2013). In 2006, a group of 7 health profession organizations began to explore how professionalism is defined, taught, measured, and evaluated. Initially, the purpose was to identify public-domain educational and assessment tools to promote professionalism. Many parallel, overlapping efforts to support professionalism within professions existed, but little work had been done to develop a professionalism framework across professions. In 2009, the Interprofessional Professionalism Collaborative (IPC) was formed, and currently consists of 13 health professions and one assessment organization. (Audiology, Dentistry, Nursing, Medicine (Allopathic, Osteopathic, and Internal), Occupational Therapy, Optometry, Pharmacy, Physical Therapy, Psychology, Speech-Language Pathology, and Veterinary Medicine). The IPC’s initial effort was to define a unique construct for interprofessional professionalism (IPP) focusing on observable behaviors that illustrate the elements of professionalism uniquely relevant to collaborations across a variety of health professionals. IPP was defined as “Consistent demonstration of core values evidenced by professionals working together, aspiring to and wisely applying principles of, altruism, excellence, caring, ethics, respect, communication, accountability to achieve optimal health and wellness in individuals and communities.” (1Stern, 2006). Following the development of this construct, a website was created to disseminate information and numerous interprofessional presentations were provided on interprofessional professionalism to obtain feedback about the development of an Interprofessional Professionalism Assessment (IPA).
The possibility of a system that could measure interprofessional professionalism compelled the group to ask: “How would you know if interprofessional professionalism was evident?” Are there defined attributes for interprofessional professionalism that can be measured and that health professions could agree upon?” “Does interprofessional professionalism change with experience from entry into a profession to clinical mastery?” The IPC began to think about how relevant measurement tools might be designed. The IPA, a 26-item behavioral assessment, is intended for preceptors/supervisors to rate how well a student under their supervision is demonstrating professionalism when interacting with other health professionals and is currently undergoing pilot testing through fall 2014. Implications for developing a reliable and valid IPA applied consistently across multiple health professions as a part of professional education could potentially be significant. The IPC will develop a toolkit including teaching materials, IPA tool based targeted at entry into the health professions, and links to resources on the IPC website.

This interactive hands-on workshop, targeting all participant levels, will engage attendees in a learning process that parallels the approach used by members of the IPC in developing a new assessment tool. Participants will develop a listing of several observable interprofessional professionalism behaviors using defined categories, apply these behaviors to assess a case vignette role play, and discuss key questions and challenges involved in the process of developing assessment tools. Challenges and lessons learned by the IPC in developing the IPA will be shared with participants, which can be translated in future interprofessional research.

Session Plan Outline (90 minutes)
Introductions of speakers and participant ice breaker (5 minutes)
Phase I - Roundtable Discussions (10 minutes)
  • Construct 2-3 behaviors that you want to see in one of the assigned interprofessional professionalism categories.
Phase II - Roundtable Discussions (15 minutes)
  • Observe a role play of a case vignette and assess the interprofessional professionalism behaviors that you observed.
  • Are there special circumstances of situations that you need to consider in your background to apply that attribute or skill?
Phase III - Presentation (15 minutes)
  • Background of the IPC
  • Construct of interprofessional professionalism as a bridge between IPE and collaborative practice
  • Modeling the process of Interprofessional collaboration
Phase IV – Roundtable Discussion of Key Questions (30 minutes)
  • How would you obtain stakeholder buy in for the new assessment’s use?
  • How would you pilot the assessment and capture the data?
  • How would you explore its psychometric properties?
  • At what point are you measuring the assessment’s outcome? (longitudinally, after a training, new learners’ pre- and post- attitudes)
  • How do you measure impact? What established tools are available that could measure impact?
  • What lessons have you learned when engaged in a study that is interprofessional or multi-institutional or multi-professional in your environment?
  • What are the challenges that have confronted you or might confront you in such a study?
Phase V – Presentation: One Model! (15 minutes)
  • Key decisions in developing and testing the Interprofessional Professionalism Assessment (IPA)
• Current and future expectations for the IPA
• Challenges and lessons learned in piloting the IPA
• Session summary

Research Citations
• Institution of Medicine (IOM) of the National Academies (March 2001). Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC.
• Institution of Medicine (IOM) of the National Academies (April 2003). Health Professions Education: A Bridge to Quality. Washington, DC.
• Institution of Medicine (IOM) of the National Academies (December 2009). Redesigning Continuing Education in the Health Professions. Washington, DC.
• Institution of Medicine (IOM) of the National Academies (May 2013). Establishing Transdisciplinary Professionalism for Health: A Workshop. Washington, DC:
• Chapter 4.

Author Biographies
Jody S Frost, PT, DPT, PhD has served on APTA staff since 1990 and is the Lead Academic Affairs Specialist and Director, Education Leadership Institute Fellowship. She facilitates physical therapist education, higher education leadership, professionalism, interprofessional education and interprofessional professionalism initiatives. Her presentations and publications focus on assessment, professionalism, interprofessional professionalism, education, leadership, mentoring, and strategic planning. Dr Frost earned her PhD from Temple University, DPT from Marymount University, and BSPT from Ithaca College.

Jennifer Adams, PharmD, a graduate of Boise State University and Idaho State University, is currently employed as Senior Director of Strategic Academic Partnerships at the American Association of Colleges of Pharmacy, providing leadership and oversight for association partnership development and strategic planning. Dr Adams also oversees national student affairs activities including PharmCAS, PCAT, and the Pharmacy Career Information Council. Her previous experience includes working in hospital and community pharmacy settings and the American Pharmacists Association.

Anthony Palatta, DDS, EdD is the Senior Director for Educational Program Development at the American Dental Education Association Policy Center where his focus is to lead and implement strategic initiatives designed to improve teaching and learning, support curriculum innovation, and the use of effective curriculum assessment tools. Dr Palatta also serves on the IPEC planning and assessment committee in which he coaches interprofessional healthcare teams.

John H Tegzes BSN, MA, VMD is a member of two professions, Nursing and Veterinary Medicine. He has practiced nursing in hospital and community settings, and veterinary medicine in private practice. He is boarded in clinical toxicology and serves as Professor of Toxicology in Veterinary Medicine at Western University of Health Sciences, where he is Director of Interprofessional Education. His scholarly activities include problem-based learning, team-based learning, IPE, professionalism, and competencies in education and practice.
4D. Implementing a Longitudinal Case-based Curriculum for IPE Learners using Faculty Teaching Teams

Workshop

Program abstract: Faculty from multiple health professions schools at the University of Washington will demonstrate, via short simulations, elements of a longitudinal, case-based IPE curriculum implemented this year, sharing tips and lessons learned. Participants will discuss benefits and barriers to implementing a classroom-based IPE curriculum for students and faculty from multiple schools.

- Sarah Shannon, University of Washington, Seattle, WA, USA
- Jennifer Danielson, University of Washington, School of Pharmacy, Seattle, WA, USA
- Tracy Brazg, University of Washington, School of Social Work, Seattle, WA, USA
- Linda Vorvick, University of Washington, Seattle, WA, USA
- Karen McDonough, University of Washington, Seattle, WA, USA

Submitted abstract:

Background: Building on our success with two stand-alone interprofessional education (IPE) sessions, we developed an integrated, seven-session IPE curriculum for pre-licensure health science students. This year, 609 students from six health science schools discussed complex patient cases in small interprofessional teams. Cases were chosen so that student teams, in discussing their plan of care for each patient, could learn from each other about each profession’s roles, values and expertise. Students were seated in six large rooms, with an interprofessional faculty teaching team facilitating learning in each room. We developed “faculty friendly” IPE teaching materials and methods to enable a broad group of over 80 faculty, many of whom had minimal prior experience with IPE, to efficiently and effectively teach our curriculum. Based on faculty debriefs and student evaluation data, session structure was refined and improved over the year.

Objectives: 1) Analyze a comprehensive model for a classroom, case-based IPE curriculum for health professional students; 2) identify key features of cases that promote student discussion of professional roles and responsibilities; 3) identify key facilitation strategies that encourage spontaneous peer learning; 4) identify key teaching supports that facilitate consistency and quality across multiple teaching teams; and 5) reflect on lessons learned and avoiding pitfalls when implementing classroom-based, integrated IPE curricula.

Methods: Using an example from the University of Washington as a backdrop, participants will learn about ways to introduce interprofessional teamwork skills into current curricula, with content aimed at pre-licensure students (i.e., senior nursing, 2nd year medical, 3rd year pharmacy, 3rd year dentistry, 1st year physician assistant, 1st year MSW, and dietetic students). This staging takes advantage of learners’ emerging profession-specific expertise while building shared team-knowledge while learners are developing their professional identities. Student team members focus on real-life cases from acute, primary and community care. Workshop attendees will participate in active demonstrations of excerpts from two sessions, selected by majority vote from four options:

- A patient hospitalized with heart failure who declines medications and home care
- Disclosure of a medical error by the health care team
- Dental pain emergencies occurring in acute and primary care settings
- Post-deployment care for veterans returning from active service

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**Teaching Plan:**
- 20 minutes: Overview: Short didactic introducing curriculum, faculty teaching materials, and student and faculty evaluation data.
- 30 minutes: Active demonstration of excerpt from first selected IPE session, followed by guided discussion:
  1. What made this case a good for all the professions on the team?
  2. How do we maximize learning about other’s roles in this active learning session?
  3. What teaching materials and strategies support consistency and quality across teaching teams?
- 30 minutes: Active demonstration of excerpt from second selected IPE session, followed by guided discussion (repeat questions above)
- 8 minutes: Summary pearls, and lessons learned; Open access location for teaching materials shared
- 2 minutes: Evaluation of workshop

**Results/Implications:** Upon participation in this workshop, faculty, graduate students, and clinical educators from across the health professions will gain new skills and methods for teaching interprofessional learners and preparing interprofessional teaching teams.

**Author Biographies**
Sarah E. Shannon, PhD, RN is an Associate Professor in Biobehavioral Nursing and Health Systems and adjunct in Bioethics and Humanities at the University of Washington. She is also on the interprofessional ethics consult team for the University of Washington Medical Center. She teaches bioethics, communication skills, conflict management, and error disclosure for nurses, physicians and other learners. She leads a subcommittee focused on implementing interprofessional education broadly across six health science schools.

Jennifer Danielson, PharmD has worked in pharmacy education since 1996 and IPE since 2010. Her years of practice as a certified diabetes educator grounded her in the importance of interdisciplinary practice. After work as an IPE teaching scholar, she became lead for curricular integration of IPE at the University of Washington School of Pharmacy in 2012. She serves on the University’s IPE Implementation Committee and is a co-developer of the Foundations of Interprofessional Practice series.

Tracy Brazg, MSW, MPH is a doctoral student at the University of Washington School of Social Work. She is also a clinical bioethics fellow at Seattle Children’s Treuman Katz Center for Pediatric Bioethics, and part of the junior faculty team involved in the University of Washington's IPE initiative.

Linda Vorvick, MD is an Assistant Professor in the School of Medicine with a specialty in family practice. She serves as the medical director, director for academic affairs and director of didactic curriculum for the MEDEX program, which educates physician assistants across a multi-state region. In her teaching leadership role, she is focusing on increasing capacity for active and interprofessional student learning.

Karen McDonough, MD is an Associate Professor in General Internal Medicine and a hospital based internist at the University of Washington. She directs the 2nd year medical students yearlong clinical skills course, and is integrating team skills and interprofessional training into the clinical skills curriculum. She is part of the team designing a new School of Medicine curriculum, which will include a greater focus on interprofessional teaching and learning.
4E-1. A Model of Interprofessional Collaboration in a Primary Care Setting

Oral Presentation

- Pamela Wener, University of Manitoba, Winnipeg, MB, Canada
- Roberta Woodgate, University of Manitoba, Winnipeg, MB, Canada

Submitted abstract:
Background: Implementation of Shared Mental Health Care programs has increased patient access to timely mental health services. A key component of Shared Mental Health Care programs is interprofessional collaboration (IPC) between care providers. However, lacking is a model that describes the structures and processes that facilitate interprofessional collaboration in a shared care context.

Objectives: This presentation will share the results of a qualitative, grounded theory study that explored the intricacies of interprofessional collaboration within a shared care context and from the perspective of the health care providers and program leaders.

Methods: Shared care counselors (n=5), family physicians (n=17), psychiatrists (n=4), nurse practitioners (n=8) and program leaders (8) were recruited (N=42). Data were collected using individual in-depth semi-structured interviews (19) and focus groups (7). Using constant comparison, the first seven interviews were coded to develop a frame that was used to code the remaining individual interviews and create a preliminary model. Focus group interviews were similarly coded, and were used to expand on the preliminary model, examine the relationships between the categories, and gain consensus on the model.

Results: The core category of Interprofessional Patient-Centred Collaboration involves four categories: The condition of Perceived Need, the structure of Co-location, and the processes of Fitting-in, and Developing and Maintaining Mutually Collaborative Relationships.

Implications: Identifying and describing the structures and processes that providers use to facilitate interprofessional collaboration deepens our understanding of the complexities of interprofessional collaboration in a shared mental health care context. The resulting model of interprofessional collaboration may be tested for its applicability to other health care context.

4E-2. Developing New Roles in the Primary Care Team to Identify and Treat Behavioral Health Issues

Oral Presentation

- Robert Ferguson, Jewish Healthcare Foundation, Pittsburgh, PA, USA

Submitted abstract:
Background: To reduce costs and improve health, primary care teams are developing their capacity to identify and treat behavioral health issues. The Pittsburgh Regional Health Initiative, an operating arm of the Jewish Healthcare Foundation, has been providing training and coaching to address this need.

Objectives and Results: In regard to evidence-based models for depression and unhealthy alcohol and other drug use, the audience will be able to:
• Outline the roles, characteristics, skills, and training of the front desk staff, roaming nurse or medical assistant, patient, primary care provider, care manager, consulting psychiatrist, and medical consultant (e.g., screening, motivational interviewing, and inter-disciplinary systematic case reviews)
• Describe the challenges and advantages of different team configurations.
• Discuss the configuration of the team that would work best for their organization, needs, and culture.

Methods: The presentation will achieve these objectives by drawing on experiences, best practices, and lessons learned from three projects, which span 85 primary care offices in four states. These projects include: the locally-funded Integrating Treatment in Primary Care (ITPC) pilot, the AHRQ-funded Partners in Integrated Care (PIC), and the CMMI-funded Care of Mental, Physical, and Substance Use Syndromes (COMPASS) initiative. The ITPC pilot and PIC initiative implemented an SBIRT plus IMPACT/DIAMOND model in three community health centers and 57 primary care offices, respectively. And PRHI has implemented COMPASS, which is based on DIAMOND and TEAMcare, in 25 primary care offices.

Implications: In an accountable care world focused on population health, primary care teams are positioning themselves to address under-identified and under-treated behavioral health issues that impede medical care and increase costs. Implementing these new team-based models presents implications for nurses, medical assistants, physicians, and other team members. This presentation will provide guidance and best practices to groups to help them consider how to configure their teams in response to these implications and needs.

Author Biographies
Robert Ferguson is a program manager at the Jewish Healthcare Foundation, focusing on the implementation of evidence-based models of primary care for behavioral health issues. Mr. Ferguson managed a $3.4 million AHRQ grant to disseminate these models in four states, and supported the evaluation of the preceding pilot. Mr. Ferguson is serving as the site director for a CMMI Healthcare Innovation Sub-Award to implement a collaborative care management model for depression plus chronic medical conditions.

4E-3. Enhancing Primary Healthcare Delivery in the Inner City Through Interprofessional Team Work

Oral Presentation
• Deborah Kopansky-Giles, Canadian Memorial Chiropractic College/St. Michaels Hospital, Toronto, ON, Canada
• Judith Peranson, St. Michael’s Hospital, Department of Family and Community Medicine, Toronto, ON, Canada
• Fok-Han Leung, St. Michael’s Hospital, Department of Family and Community Medicine, Toronto, ON, Canada

Submitted abstract:
Interprofessional collaboration increasingly plays a key role in effective primary care delivery models across North America, including Family Medicine teaching sites. Collaborative, team-based care has been demonstrated to: improve access to health care services; improve the quality of care patients receive and their satisfaction with care; improve health care outcomes; improve employee retention
and satisfaction with work-related quality of life; and more efficiently and effectively utilize health resources. In addition, in order for health professional trainees to be collaborative practice-ready graduates they require a comprehensive understanding of how to work as a team, each others’ practice roles and scopes and the importance of non-hierarchical health team structures.

This presentation will describe the evolution of an interprofessional model of primary healthcare delivery within a hospital-based setting. Over the past decade, the Academic Family Health Team (AFHT) in the Department of Family and Community Medicine at St Michael’s Hospital in Toronto has been in the business of transforming primary healthcare. The AFHT provides services to the inner-city community of Toronto through 5 clinical sites located conveniently in the downtown east core. Our model of care incorporates patient- and family-centered values; interprofessional collaboration; incorporation of advanced communication technology, and accessible evidence-based care and research. Evaluation of our efforts has proved emancipating for both clinicians and patients— with the delivery of integrative healthcare services, improved coordination of care, enhanced patient outcomes and satisfaction, improved quality of work life for our health professional team, and patient/family empowerment in self-help strategies. This model of care was identified by the Council of the Federation Canada, Health Care Innovation Working Group as one of 4 innovative models of primary care delivery to be emulated in Canada. The session will describe our experiences in building our integrative healthcare team including interprofessional team development, faculty development and interprofessional education. Facilitators and barriers to the development of successful integrative models of primary care will also be described. Specific strategies that have facilitated success in our experience will be shared.

**Author Biographies**

Dr. Deborah Kopansky-Giles is a chiropractor/researcher on staff in the DFCM at St. Michael’s Hospital and is a Professor at the Canadian Memorial Chiropractic College. Dr. Kopansky-Giles coordinates the chiropractic program in the DFCM and co-leads the department’s Interprofessional Education Working Group and interprofessional team development for the DFCM. In addition, she is actively involved in conducting research on IPE models.

Dr. Judith Peranson is a family physician in the Department of Family and Community Medicine (DFCM) at St. Michael’s Hospital and on faculty at the University of Toronto (U of T), Faculty of Medicine, DFCM. She chairs the U of T IPE Working and Advisory Committee and is co-chair of the St. Michael’s Hospital DFCM IPE Working Group. Dr. Peranson divides her time between clinical work, teaching family medicine residents and in designing/evaluating IPE programs.

Dr. Fok-Han Leung is a family physician in the Department of Family and Community Medicine (DFCM) at St. Michael’s Hospital and on faculty at the University of Toronto (U of T), Faculty of Medicine, DFCM. He is the medical lead for the 80 Bond Health Centre site in the department. Dr. Leung is in active clinical practice in addition to teaching family medicine residents and conducting research on innovative models of collaborative practice and the use of technology to support interprofessional team work.

**4E-4. Developing an Awareness of Culturally Appropriate Primary Care in Palliative Medicine**

*Oral Presentation*

- **Erica Cameron-Taylor**, Calvary Mater Newcastle/The University of Newcastle, Newcastle, New South Wales, Australia
• **Katy Clark**, Calvary Mater Newcastle, Newcastle, New South Wales, Australia
• **Cate Hayes**, Calvary Mater Newcastle, Newcastle, New South Wales, Australia
• **Kathryn Bensley**, Calvary Mater Newcastle, Newcastle, New South Wales, Australia

Submitted abstract:
Specialist Palliative Care is the care of people with life-limiting illness and complex needs. Palliative Medicine utilises a multidisciplinary team approach and it's tenants of optimal symptom control, an emphasis on quality of life and excellent communication are increasingly being recognised as important for all doctors in all disciplines. Final year medicine students from The University of Newcastle in South Eastern Australia undertake a 1 week intensive placement in Palliative Medicine. Review of the existing curriculum identified a lack of interdisciplinary education, cultural awareness and education surrounding the nexus between specialist and generalist palliative care. A focus group was formed and a problem-based case session was developed that focusses on care delivery to an Aboriginal patient. The case involves students in considering Aboriginality in an end-of-life-care situation, the psychological and spiritual issues surrounding the care of an Aboriginal person at home, the role of the General Practitioner (Family Medicine Practitioner), the role of the specialist team and the input of allied health professionals including social workers, physiotherapists, occupational therapists and Aboriginal health care workers.

4F-1. **Patient Safety and Interprofessionalism in Hospitals: Considering the Ways Different Professions Think About Patient Safety**

*Oral Presentation*

• **Paula Rowland**, University of Toronto, Toronto, ON, Canada
• **Simon Kitto**, University of Toronto, Continuing Professional Development, Toronto, ON, Canada

Submitted abstract:
**Background:** Patient safety has been presented as a unifying concern across the health professions. This conceptual connection has been accompanied with efforts towards standardized, interprofessional safety competencies, as well as increased attention towards interprofessional education for systems improvement. However, progress towards improving patient safety in hospitals is viewed as disappointingly slow. This paper adds to a body of literature that suggests patient safety remains a difficult problem to solve because safety is not simply a technical issue, but is a practice embedded in organizational and professional contexts.

**Objectives:** In this paper, we explore differences between the professions, as different professional groups intersect with the ways patient safety is thought about, talked about, and known about in an acute care hospital in Canada. We refer to these different ways of thinking, talking, and knowing as discourses.

**Methods:** We draw on findings from a critical discourse analysis of documents related to patient safety in medical units in hospitals (published between 1999 and 2013), as well as interviews from (a) formal health care leaders (n=6) and (b) practicing clinicians from medicine, nursing, occupational therapy, physiotherapy, and social work (n=9). Results. This analysis disrupts the notion that a single discourse of patient safety acts as a unifying mechanism across the professions.
**Implications:** This discussion draws attention to how patient safety discourses may be participating in the shaping of professions, how the professions may be interacting with patient safety discourses differentially, and what the implications could be for the way different professions may or may not work with one another. As a result of this study, patient safety program designers might consider how the discourses of different professions intersect within their own hospital.

**4F-2. Complexity and Hospitalist Care: Solidifying the Role of Advanced Practice Providers on Interprofessional Hospitalist Teams to Improve Cost, Quality and Outcomes**

*Oral Presentation*

- **Julia Driessen,** University of Pittsburgh, Pittsburgh, PA, USA
- **Ben Reynolds,** UPMC Physician Services Division, Pittsburgh, PA, USA
- **Amy Meister,** UPMC Emergency Resource Management Inc., Pittsburgh, PA, USA

Submitted abstract:

**Background:** Inpatient primary care has largely shifted from community-based primary care physicians to hospitalist physicians. As resources decline, hospitals have increasingly utilized advanced practice providers (APPs), nurse practitioners and physician assistants, to augment hospitalist services. Little research exists on the role of hospitalist APPs, the skills necessary, or the cost, quality or health outcome effects of interdisciplinary hospitalist teams. UPMC’s Emergency Resource Management, Inc. staffs hospitalist teams across seven hospitals that logged 77,288 thousand visits in fiscal year 2012.

**Objectives:** Using complexity theory as a basis, we explore three primary objectives. First, we assess the structure, roles and performance of the interprofessional hospitalist teams in their organizational and environmental context. Second, we analyze how the team affects cost, quality and health outcomes. Third, we describe how hospitalist practice can inform and adapt residency programs and physician acculturation to team-based care.

**Methods:** This study uses a mixed methods approach. Utilizing semi-structured interviews and the validated Interdisciplinary Team Performance scales (Temkin-Greener, et al 2004), we present a framework to describe APP roles, team performance and system barriers and facilitators. We conducted a controlled pre-post analysis to compare ERMI’s seven hospitalist sites with “usual care” sites to quantify differences in medical costs, quality indicators, readmissions and patient satisfaction attributable to the interdisciplinary team. Finally, we describe the “feedback loop” into the APP residency program.

**Results:** This project is in progress with results expected in April 2014. Early data shows that physician acceptance of APPs, skill mix and resource constraints are drivers of interdisciplinary hospitalist team composition and performance. Quantitative data indicates significant cost and quality differences between the intervention and control sites.

**Implications:** This study has broad implications for the implementation of new interdisciplinary practice models in complex care environments. We present both evidence for an interdisciplinary hospitalist model and a framework to account for system complexities when implementing the model.

**Author Biographies**

Amy Meister, DO, is the Vice President of Hospitalist Services at UPMC. She received her medical degree from The West Virginia School of Osteopathic Medicine and completed her residency in internal
medicine at Johns Hopkins University. Dr. Meister is board-certified in internal medicine and previously served as the President of a hospitalist group in Kansas. She has practiced as a hospitalist since 2003.

Ben Reynolds is a physician assistant with the division of trauma and general surgery at UPMC Presbyterian. He is the director of the UPMC Office of Advanced Practice Providers, which oversees 1,400 advanced practice providers throughout the UPMC system. Additionally, Reynolds serves as a Clinical Assistant Professor of Surgery for the University of Pittsburgh Medical School, University of Pittsburgh School of Health and Rehabilitation Sciences, and Adjunct Assistant Professor of Physician Assistant studies for Chatham University. Reynolds served in the United States Navy prior to pursuing a career in the physician assistant field. He is a member of the Eastern Association for the Surgery of Trauma, Pennsylvania Society of Physician Assistants, American Academy of Physician Assistants, and American Association of Surgical Physician Assistants.

Julia Driessen, PhD, is an assistant professor in the Department of Health Policy and Management in the Graduate School of Public Health at the University of Pittsburgh. She has secondary appointments in the Department of Economics and Department of Biomedical Informatics. Her research interests include program evaluation and the links between health and socioeconomic status. Recent work includes analyses of the social and economic effects of vaccination programs and eHealth technologies in low-resource settings.

4F-3. Why hospital clinical staff do not activate the rapid response system (RRS): An analysis of intraprofessional and interprofessional sociocultural factors

Oral Presentation

- Simon Kitto, University of Toronto, Continuing Professional Development, Toronto, ON, Canada
- Stuart Marshall, Monash University, Academic Board of Peri-operative Medicine, Prahran, Melbourne, Australia
- Sarah McMilan, University of Toronto, Continuing Professional Development, Faculty of Medicine, Toronto, ON, Canada
- Stuart Wilson, Monash Medical Centre, Clayton, Melbourne, Australia

Submitted abstract:

**Background:** The medical emergency team (MET) is a rapid response system that has been instituted to allow healthcare professionals to promptly access help when a patient’s status deteriorates. Despite patients meeting the criteria, up to one-third of the MET cases that should be activated are not actually called, constituting a ‘missed MET call’.

**Methods:** Ten focus groups of senior and junior nurses and physicians across four hospitals were conducted to gain greater insight into the social, professional and organizational factors that mediate the usage of MET call systems. Directed content analysis of transcripts explored the participants’ personal experiences with the MET call system, and complementary directed content analysis was guided by theoretical constructs from the interprofessional practice and the sociology of professions literature.

**Results:** Health professionals’ reasons for not calling a RRS activation included: 1) the potential for being perceived as being incompetent by colleagues if an unwarranted RRS activation was made; 2) two separate intra-professional clinical decision-making pathways when deciding whether to activate the MET call system; a highly hierarchical pathway in nursing, and a more autonomous pathway in medicine,
and 3) interprofessional communication barriers between nursing and medicine when deciding to make and actually making a MET call.

**Conclusions:** Sociocultural factors shape the intra- and interprofessional pathways to making MET calls, if they are made, and the nature of how they are made. These findings have important quality improvement and patient safety implications in terms of informing the design of CIPE activities within the clinical context.

**Author Biographies**
Dr. Simon Kitto is a medical sociologist who has been undertaking research in medical education, sociology of surgery and health services for over ten years. He is the Director of Research in Continuing Professional Development and an Assistant Professor at the Department of Surgery and a Scientist at The Wilson Centre, University of Toronto. His main research interests are studying how structural, historical and socio-cultural variables shape interprofessional clinical practice, educational settings and activities.

Sarah E. McMillan is a Research Associate in Continuing Professional Development, Faculty of Medicine at the University of Toronto and specializes in incorporating the patient and family perspective within health research. She holds a Master of Arts in Sociology from Wilfrid Laurier University with a background in the critical analyses of health, illness, medicine and disability. She is passionate about combining her previous patient advocacy work with her scholarly pursuits.

**4G-1. Interprofessional Collaboration and documentation: navigating through the legal complexity of regulatory rules**

**Oral Presentation**
- **Keith Adamson**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Joanne Maxwell**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Nicole Thomson**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Kim Bradley**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada

**Submitted abstract:**
**Background:** There is a growing concern that self-governing regulatory professional bodies demonstrate inadequate regard for the pressing need for system level integration, cooperation and collaboration (Lahey & Currie, 2005). A recent electronic health record project in Canada’s largest children’s rehabilitation hospital, Holland Bloorview provided an arena to tackle professional self-regulation as a barrier to interprofessional collaboration and care. The goal of the electronic health record project was to have a fully integrated documentation system for all professions that would support seamless, integrated care. Challenges arose however with respect to concerns over the varying record-keeping standards endorsed by the self-regulating professional bodies for those professions that were involved in the project. In order to address this barrier and ease concerns of the clinicians who were involved in the project, eight provincial professional health regulatory bodies were invited to Holland Bloorview for a conversation on interprofessional documentation.

**Objectives:** The aim of the regulatory body meeting was to clarify documentation accountabilities according to profession specific legal requirements within a team environment.
**Methods:** Five questions were prepared and sent to 8 professional regulators two weeks before a focus group. The focus group lasted four hours. Consensus building around key interprofessional documentation practices was sought. Notes were taken. Thematic analysis was applied to the notes.

**Results:** Findings from the focus group suggest that the following themes are critical to regulatory bodies in understanding documentation practices on interprofessional teams: accountability for diagnosis in joint reports; documenting overlaps in scope of practice; relying on another clinician’s note; writing notes so that other’s understand (including the patient); and documenting and sharing sensitive information on teams.

**Implication:** Regulatory bodies may not be as restrictive to interprofessional care as previously conceived in the literature. Health professionals need to be aware that there are some risks associated with collaborative care.

**4G-2. Review of political and legal influences on interprofessional education and collaborative practice development in New Zealand**

*Oral Presentation*

- **Brenda Flood,** Auckland University of Technology, Auckland, New Zealand
- **Clare Hocking,** Auckland University of Technology, Auckland, New Zealand
- **Marion Jones,** Auckland University of Technology, Auckland, New Zealand

**Submitted abstract:**

**Background:** A proliferation of government policy and strategy documents has driven significant reforms in the New Zealand health system over the last three decades. While the hallmarks of interprofessional collaboration have been consistently signalled, including the need for a consumer focus and involvement, effective communication, and interprofessional and interagency collaboration, there is no explicit mandate. Health services, professional regulatory bodies and educational providers have been left to read between the lines in the implementation of interprofessional collaborative practice to instil that message into the country’s future health professionals. A lack of a consistent and collaborative approach to the development of interprofessional education and collaborative practice is one consequence of leaving professional bodies, educational providers, and health planners to make up their own minds about its importance.

**Objectives:** To generate recommendations at an institutional and national level for the policy change required to deliver the benefits of collaborative interprofessional education and practice in the New Zealand context.

**Method:** A review of health policy, health reform, and associated literature in New Zealand since the early 1990s was undertaken to identify how, where and why elements of interprofessional practice have been signalled; whether those imperatives have been consistent or shifted under successive governments; and the implications for health service delivery and health professional education. Comparisons with other health systems in the UK, Australia and Canada will be discussed.

**Results:** The review identified the need for a national approach to interprofessional education and collaborative practice policy development. Specific recommendations for how the health & education sector might proceed with developing a coordinated and collaborative approach will be generated.
Implications: For health educators, health planners, policy makers, professional bodies. To make explicit the link between effective interprofessional education and practice and its role in achieving the enduring health priorities for New Zealanders.

Author Biographies
Brenda Flood MSc, DipOT, NZROT, (Doctoral Candidate) Brenda is a senior lecturer at the University of Technology, Auckland, New Zealand, where she is an interprofessional education and practice development leader within the Faculty of Health and Environmental Sciences. Brenda is currently undertaking doctoral studies with a focus on interprofessional education development for undergraduate health students.

Professor Clare Hocking PhD, NZROT Professor Clare Hocking teaches on the Bachelors, Masters and Doctoral programmes at the Auckland University of Technology. She has published more than 80 refereed journal articles, 21 chapters, and given more than 140 presentations. She is the Executive Editor of the Journal of Occupational Science and Co-Chair of the World Federation of Occupational Therapists International Advisory Committee: Human Rights. Clare was appointed as the first occupational therapy professor in New Zealand in 2012.

Professor Marion Jones BA; M.Ed.Admin(Hons); PhD Marion is Professor of Interprofessional Learning and Dean of University Postgraduate Studies at Auckland University of Technology. She is a Director of the National Centre for Interprofessional Education and Collaborative Practice in New Zealand. She is at present involved in co editing a book on Interprofessional Leadership. Marion's research and teaching areas include theory practice debate, interprofessional team practice, perioperative nursing, research methodology and developing a research culture including student/supervisor relationships.

4G-3. Driving change – collaboration between university and non-government organisations for the future of interprofessional healthcare – filling the service-delivery and education gap

Oral Presentation
- Beverly Raasch, James Cook University, Townsville, Queensland, Australia
- Susan Gordon, James Cook University, Townsville, Queensland, Australia
- Cindy Sealey, James Cook University, Townsville, Queensland, Australia
- Nadene George, James Cook University, Townsville, Queensland, Australia

Submitted abstract:
Background: This panel will lead an interactive discussion based on one University’s approach to developing an interprofessional curriculum across health and social disciplines and two clinics, which have provided the opportunity to pilot the curriculum in real life work, integrated learning settings.

Objectives: The objective of this panel presentation is to showcase the development of a curriculum in interprofessional education as well as the implementation of two interprofessional clinics in Townsville, Australia.

Methods: The case study has been developed using a mixed methods approach. Participatory action research has supported the change management in this development.
**Results:** The case study will identify, firstly, the decisions about development and implementation of the curriculum models, and the impact the experience of interprofessional learning and practice has had on the patients, students and staff in the clinics. Secondly, the drivers for change and the responses of the health professionals to the concept of interprofessional education and practice will be described with a focus on identifying the barriers, how to overcome them, how to move from siloed practice in University clinics to sharing facilities in an integrated clinic. The process of setting up the integrated clinic, including the record system, clinical governance, and business plan will be described as the basis for the discussion. Thirdly, an innovative approach involving community non-government organizations was used to increase clinical placements in an interprofessional context. The panel will discuss the education, service delivery and financial models developed and how they might vary between NGOs. Additionally, the process for the development of these Interprofessional clinics will be described with respect to learning, supervision, the financial model and evaluation. It will also examine the different cost models and the implications for sustainability, beyond grant funding in start up.

**Implications:** The start up of new models for curriculum development and delivery and practice require a staged approach. This panel would provide an opportunity for those in that situation to learn from the experience of others and for the panel members to listen to others experience and adapt these to the current situation in the University. In addition, we never have the luxury of full funding for work integrated learning interprofessional experiences. Presenters will present some key issues that look at models of care for sustainability for interprofessional learning and practice. Audience members will be invited to share brief needs assessment for learning. Some key discussion points, put forth by a facilitator member of the panel, will follow this initial session.

**Author Biographies**

Associate Professor Beverly Raasch is a General Practitioner with a PhD in skin cancer research. Bev held the position of Director of Clinical Sciences Course at the UAE University where she coordinated the School of Medicine Clinical Skills program. At JCU, Bev has been involved with the Medical School since its inception, particularly in development of the original Clinical Skills training program. Currently, Bev is the Interprofessional Practice and Curriculum Development Leader at James Cook University, working to establish interprofessional education within the health and social care disciplines.

Associate Professor Susan Gordon is a Physiotherapist with clinical experience in rural Australia. Sue is currently Head of the Physiotherapy discipline at James Cook University, where she contributed to the development of the Physiotherapy curriculum. Sue is also actively involved in the development of the JCU Interprofessional Clinic – a clinical initiative funded by Health Workforce Australia to increase the number of clinical placements for JCU students by partnering with non-government organisations to provide interprofessional practice and education.

Ms. Cindy Sealey is the Interprofessional Practice and Curriculum Development Research Officer at James Cook University. Cindy has an Honours degree in Psychology and is currently working on embedding interprofessional education in northern Queensland and across the health and social care disciplines at James Cook University.

Mrs. Nadene George has been responsible for the development of the business model, financials and planning within the Clinics.
Ms. Blanche Waddell is the Project Officer for the JCU Interprofessional Clinic and has been responsible for all aspects of planning, including initial negotiations with non-government organisations, compilation of resources and planning of staff training workshops.


Oral Presentation

- Barbara Jones, University of Texas Austin, School of Social Work, Austin, TX, USA
- Shelley Cohen Konrad, University of New England, Portland, ME, USA
- Maureen Rubin, University of Nevada, Reno, NV, USA
- Jaysharee Nimmagadda, Rhode Island College, Providence, RI, USA
- Anna Scheyett, University of South Carolina, Columbia, SC, USA

Submitted abstract:

Background: Social work as a profession has solid roots in cross-disciplinary, collaborative practice. Given the current momentum in healthcare education and practice, social workers can offer responsibility for and leadership of interprofessional initiatives. This presentation highlights social work’s historical grounding in collaborative practice and the intrinsic professional strengths and ethics that make social workers natural interprofessional teachers, learners, practitioners, collaborators, and leaders.

Objectives:

1. Describe historical and principled collaborative competencies in social work education and practice
2. Describe the interdependence of social work knowledge, attitudes and skills with interprofessional competencies and triple aim goals
3. Identify barriers within, between and among the professions that may complicate interprofessional collaboration
4. Offer exemplars of social work interprofessional learning and clinical practice.

Methods: The presenters will offer an overview of social work’s collaborative values and interdisciplinary ethics and then illustrate through narrative and media interprofessional initiatives that represent the natural roles and responsibilities of social workers as drivers and collaborators in interprofessional education, practice, organizational development and research.

Results: Collective knowledge and experience from national social work Interprofessional education (IPE) leaders led to common understanding and a mission to strengthen the need to prepare a workforce trained for collaborative practice and the critical role of social work in interprofessional education and practice. The need to better educate other professions about contributions that social workers can make to health education, workplace transformation and healthcare policy was also identified.

Implications: Social work as a field provides key skills to interpret and teach IPE competencies and to collaboratively lead healthcare reform initiatives at a local and global context. Understanding the scope of social work professional roles, values and ethics will raise awareness of their critical importance to healthcare transformation and the value of collaborative practice to improve health outcomes.
4H-1. Interprofessional Collaborative Practices: Framework for Interactional Factors

Oral Presentation

- Emmanuelle Careau, Universite Laval, Center for Interdisciplinary Research in Rehabilitation and Social Integration, Quebec, QC, Canada
- Nathalie Brière, Centre de Santé et Services Sociaux de la Vieille-Capitale, Quebec, QC, Canada
- Serge Dumont, Universite Laval, School of Social Work, Quebec, QC, Canada

Submitted abstract:
Background: According to the World Health Organization (2010), the main determinant of successful interprofessional collaboration is the development of a “collaborative practice—ready health workforce”, which refers to practitioners “who has learned how to work in an interprofessional team and who is competent to do so”. However, consulting the scientific literature, in itself, does not necessarily help practitioners understand clearly how they should interact with each other to achieve optimal collaboration in their context.

Objectives: The aim of this session is to present a comprehensive framework illustrating how collaborative practice should be operationalized in clinical settings and to describe how it was developed and validated.

Methods: A seven--phases systematic procedure was followed to search the relevant literature and develop the framework. Then, it was validated among experts and stakeholders (n=20) following three consensus group sessions and a survey.

Results: The Continuum of Interprofessional Collaborative Practice in Health and Social Care illustrates non--hierarchical and non--linear types of collaboration according to four components. This framework explains that interactions emerge from a specific situation: practitioners need to create a partnership to address the complexity of clients’ biopsychosocial needs. Underlying these partnerships is an intention that motivates them to collaborate. Depending on the context, this would evolve into intentions such as to “inform”, “exchange information”, “agree on disciplinary objectives”, and ultimately, “share decisions and actions regarding a common objective”. As practitioners advance along the continuum, interdependence increases and disciplinary paradigms become more integrated (unidisciplinarity, multidisciplinarity and interdisciplinarity).

Implications: This framework integrates the current scientific knowledge and clinical experience regarding collaborative practice. It is considered as a relevant and useful knowledge translation tool to be used in undergraduate and continuing education initiatives.

Author Biographies
Dr Emmanuelle Careau is assistant professor in the rehabilitation department at the Faculty of Medicine of Université Laval (Québec City, Canada) and affiliate assistant professor at the College of Health Disciplines at University of British Columbia. Dr. Careau did her graduate studies and postdoctoral training on the conceptualisation and evaluation of interprofessional education and practice. She has been leading the scientific development at the Réseau de collaboration sur les pratiques interprofessionnelles en santé (RCPI).

Dr Nathalie Brière received her PhD in psychology and worked more than 15 years in diverse clinical settings. Former coordinator of Health Canada IPECP project at Université Laval from 2005 to 2008, she
is now the IPECP responsible at the Centre de santé et de services sociaux de la Vieille—Capitale (Quebec City, QC, Canada). Dr Brière has been leading continuing education initiatives a the Réseau de collaboration sur les pratiques interprofessionnelles en santé (RCPI).

Dr Serge Dumont is a professor at Faculty of Social Sciences, Laval University. He is the Scientific director of the Centre de santé et de services sociaux de la Vieille—Capitale (Quebec City, QC, Canada). Career Award holder from the Canadian Institutes of health research (CIHR) (2000—2005) and former Director of the School of Social Work (2006—2010), professor Dumont has been leading the development and the implementation of the Réseau de collaboration sur les pratiques interprofessionnelles en santé (RCPI), which supports IPE activities in academic programs.

4H-2. Interprofessional Clinical Education: Internal and External Models

Oral Presentation

- Ellen Cohn, University of Pittsburgh, School of Health and Rehabilitation Sciences, Pittsburgh, PA, USA
- Joel Stevans, University of Pittsburgh, Department of Physical Therapy, Pittsburgh, PA, USA
- Johanna Steenrod, University of Pittsburgh, Health Policy Institute, Pittsburgh, PA, USA

Submitted abstract:
Background: At Pitt’s School of Health and Rehabilitation Sciences, all students preparing to be athletic trainers, audiologists, clinical dietitians, emergency medicine technicians (paramedics), health information managers, occupational therapists, orthotists, physical therapists, physician assistants, rehabilitation counselors, or speech-language pathologists spend proscribed time in a variety of clinical education experiences. These experiences are planned sequentially and in coordination with on-campus academics.

Objective: Clinical or field learning experiences are essential to rehabilitation training. This presentation describes two models of interprofessionalism: 1) An over-arching committee of clinical education coordinators representing 11 professional disciplines; and 2) Interprofessionalism at clinical training sites, with data and exemplars from a baseline audit. Interprofessional clinical practice takes many forms, depending upon the type of site; engaged professions; and degree of interdependence of clinical decision making.

Methods: As an internal model, the interprofessional Clinical Coordinators Committee (14 faculty; 2 staff) collaborates via frequent meetings and listserv interactions on: policy; pre-requisite requirements (HIPAA training; medical and security clearances; site requirements); and facilitating infrastructure (i.e., clinical tracking software). Intelligence is shared about clinical sites, with contracts established and renewed in tandem. Clinical coordinators intentionally encourage site preceptors to involve students in interdisciplinary meetings.

Results: All but one program reported that ~95% of students have exposure to some interprofessional team care upon graduation and all perceive the need to transform our approach to interprofessional training. A recent, baseline audit yielded 19 training sites with interprofessional clinical experiences. The most common placement was in the outpatient setting (48%) followed by inpatient (26%), and public and private partnerships (26%). Exemplars demonstrated numerous permutations in the discipline types across teams.
Implications: Implications include the “value added” when clinical education coordinators from multiple disciplines coordinate policies and site acquisition/retention; and collectively stimulate interprofessional training. Audits and analyses of an institution’s interprofessional training portfolio can inform strategic planning.

Author Biographies
Ellen R. Cohn, PhD, ASHA Fellow, is Associate Dean for Instructional Development; Director (Interim), Rehabilitation Science Program; and Professor, Communication Sciences and Disorders, School of Health and Rehabilitation Sciences (SHRS), University of Pittsburgh. She has appointments in Dentistry, Pharmacy, Regenerative Medicine and CTSI. Dr. Cohn has co-authored of 5 books and numerous articles, chapters and presentations. She convenes and supports the SHRS Clinical Coordinators Committee.

Joel Stevans, DC, PhD(c) is postdoctoral fellow in Department of Physical Therapy at the University of Pittsburgh. He received his BS in Biochemistry from Cal Poly, SLO, CA, his Doctor of Chiropractic from the Los Angeles College of Chiropractic, Whittier, CA, and is currently a doctoral candidate in Rehabilitation Sciences at the University of Pittsburgh. His research focuses on implementation science, interprofessional care models, and health services research.

Johanna Steenrod, MS, CFA is a Graduate Student Researcher at the University of Pittsburgh’s Health Policy Institute. She is pursuing a PhD in Health Services Research and Policy. Her research interests include healthcare workforce innovations, interprofessional teams, and organizational and systems theory. Previously, Johanna worked as a consultant in the Healthcare Industry Group at Alvarez and Marsal. She consulted many engagements, involving qualitative and quantitative analysis to achieve acquisitions, restructurings, and strategic realignments.

4H-3. Development of a post-licensure interprofessional education program in the Middle East
Oral Presentation

- Jason Hickey, University of Calgary-Qatar, Doha, Qatar
- Mohamed El Tawil, Hamad Medical Corporation, Doha, Qatar
- Brad Johnson, Zayed University, United Arab Emirates
- Michael Corman, University of Calgary-Qatar, Doha, Qatar

Submitted abstract:
Background: Healthcare in Qatar is undergoing a period of major development, driven by a strong economy and vision for a world-class healthcare system. One area identified as a potential contributor to this metamorphosis is interprofessional education (IPE). Several key steps have been taken towards developing a continuum of IPE in Qatar: formation of the Qatar Interprofessional Health Council; development of an IPE program for undergraduate healthcare students; development of a set of shared core competencies; substantial buy-in from leaders across the healthcare system; and, recent approval of funding to develop a post-licensure healthcare IPE program.

Objectives: To describe the ongoing development of the post-licensure IPE project and to present initial reflections, approaches and results.
Methods: The project was designed to leverage knowledge and resources gained from the undergraduate IPE project; Extensive stakeholder consultations were held to ensure the relevance of the undergraduate IPE model for post-licensure participants. The IPE intervention consists of two parts: an 8 hour train-the-trainer workshop for educators; and, a 16 hour workshop for participants from multiple disciplines including brief presentations, team-building exercises, and active collaboration during standardized patient simulations. Program evaluation consists of qualitative and quantitative data collection occurring before, during and after the workshops. An iterative project design facilitates the ongoing improvement of processes and procedures.

Results: Widespread interest in the initiative was apparent and the neutral leadership of the project encouraged collaboration between educators from the various disciplines. The train-the-trainer model for educators facilitated buy-in from these individuals. Challenges included difficulty utilizing funds effectively and coordinating events around various schedules for each discipline.

Implications: The foundation has been laid for a sustainable program that has the potential to increase organizational capacity for IPE and individual capacity for collaborative practice readiness. The lessons learned contribute a unique, Middle-Eastern perspective to the global IPE discourse.

4I-1. Interprofessional Collaboration; Right From the Start
Oral Presentation

- Barbara Richardson, Washington State University, Spokane, WA, USA

Submitted abstract:
Objectives: The purpose of implementing an interprofessional (IP) new student orientation program is to introduce all incoming health professional students to the concept of being a collaborative member of a health care team, right from the beginning. Using a mobile app, students participate in an IP team-based competition designed to practice communication and teamwork skills, while introducing them to one another, resources on campus, and roles of various health professions.

Background / Rationale: The goal of interprofessional education (IPE) is to prepare future providers with the knowledge, skills, values and attitudes necessary for collaborative IP practice. Numerous organizational and logistical challenges exist for implementing successful IPE programs.

Methods: During new student orientation, 450 future health professionals were launched with a team-building event, “Coug Catalyst” (college mascot is a cougar). Using a digital platform (smart phones), IP teams of 5-6 students completed as many challenges as possible in the time allotted. Participants downloaded a mobile app that displayed all missions simultaneously. Tasks were completed in any order, allowing teams to strategize how to obtain the most points. Teams completed as many challenges as possible, uploading photographs as evidence. Following the event, students participated in small group debriefing sessions and submitted on-line program evaluations.

Outcomes Achieved: “Coug Catalyst” successfully provided an authentic IP experience to begin developing the attitudes, skills and knowledge outlined in the IPEC core competencies (2011). When asked “What did you like best?” responses most frequently cited were (1) talking with patients, (2) using simulation, (3) learning about different health professions, and (4) meeting new people in other programs. Using a 1-5 scale, all IP program objectives received a mean score greater than 3.5.
**Conclusion:** Implementing an IP team-based activity during orientation sends a clear message to new students about the value of collaboration in healthcare practice.

**Author Biographies**
Barbara Richardson, PhD, RN is the Director of Interprofessional Education and Research at Washington State University. She is co-investigator for a 3 year HRSA advanced nursing education grant aimed at developing and implementing IP team-based classroom, simulation, and practice opportunities for students across multiple health professions. Dr. Richardson organizes and facilitates the Health Care Team Challenge, Community Action Poverty Simulation, and numerous IP workshops for health professional faculty and students across three state universities.

**4I-2. Interprofessional Experiences through International Clinical Engagement**

**Oral Presentation**
- **Mary Lou Galantino**, Richard Stockton College of New Jersey, Galloway, NJ, USA
- **Margaret Slusser**, Richard Stockton College of New Jersey, Galloway, NJ, USA
- **Emily Bessemer**, Richard Stockton College of New Jersey, Galloway, NJ, USA
- **Breanna Hudik**, Richard Stockton College of New Jersey, Galloway, NJ, USA
- **Julia Miliaresis**, Richard Stockton College of New Jersey, Galloway, NJ, USA
- **Sara Pitcher**, Richard Stockton College of New Jersey, Galloway, NJ, USA

**Submitted abstract:**
**Background:** Significant investments are being made around the world to improve interprofessional collaboration. Various models of interprofessional education (IPE), including service-learning, are used to teach how to be effective members of healthcare teams.

**Objective:** To explore the impact of interprofessional education and collaboration through two international clinical experiences.

**Methods:** Twelve participants from three different professions (physical therapy, nursing, and medicine) traveled to a hospital in Beijing, China, and Jacmel and Pietonville, Haiti to participate in interprofessional clinical experiences. Participants completed the Interprofessional Collaborator Assessment Rubric (ICAR) and answered six open-ended questions. These questions addressed issues such as impact of the experience on various aspects of clinical and cultural practice.

**Results:** SPSS 20.0 was used to determine paired t-tests for the variables in ICAR. Significant findings p<.05 were noted in several domains including respectful and strategic communication, appreciation of roles and responsibilities, accountability, integrating patient beliefs and values, team functioning and shared leadership. Qualitative data was examined by two raters independently of each other, using a thematic analysis. Frequency of responses included positive outcomes in multidimensional patient care with appreciation of different patient perspectives. Barriers included the lack of the language skill set and communication between healthcare professionals.

**Implications:** This international experience had impact on various domains of ICAR and participants found the interaction with other colleagues in different cultures a rich experience and would recommend to other colleagues. The results of IPE are similar in two very different cultures. The
experiences in China and Haiti helped to challenge healthcare professional thinking and develop inter-cultural sensitivity.

4I-3. Developing and Sustaining Strong Clinical Partnerships for IPE

Oral Presentation

- Gerri Lamb, Arizona State University, Phoenix, AZ, USA
- Karen Saewert, Arizona State University, Phoenix, AZ, USA

Submitted abstract:
Much has been made of the importance of developing strong academic-clinical partnerships to anchor IPE. The so-called NEXUS or integration of the expertise of both partners is viewed as central to student learning of collaboration competence. Yet, there is very little in the IPE literature describing how to develop lasting and effective relationships between academic faculty and clinical practice sites. The purpose of this presentation is to describe the process we used to establish academic-clinical partnerships for IPE and important lessons.

We are using a qualitative descriptive method to explore the process for developing effective relationships with selected clinical partners for a funded grant on IPE in primary care. Criteria for selecting potential partners are 1) current clinical placements for students of two or more different professions; 2) commitment of the practice site to interprofessional practice; and 3) interest in preparing students for collaborative practice models. We have collected narrative data on each meeting and encounter with practice partners and conducted interviews with administrators and preceptors at the sites. Narrative data and interviews are systematically coded and analyzed to identify key process steps in relationship development and important features that support or impede the process. The process of developing clinical partnerships consists of several phases, not simply introduction and implementation. Potential clinical partners have numerous competing interests and look for specific indicators of sincere commitment for working with them and achieving meaningful outcomes. Their incentives are diverse and must be addressed to sustain relationships. We identified a set of strategies to facilitate the process that we will share in the presentation.

Partnerships with clinical sites and establishing an academic-clinical nexus is now considered integral to effective IPE. The work of Nexus development is complex and multi-faceted. The results of our experience lays important foundation for understanding this important process.

Author Biographies
Gerri Lamb, PhD, RN, FAAN is the principal investigator on a 3-year grant funded by the Josiah Macy Jr. Foundation to develop and evaluate an interprofessional primary care curriculum. She currently teaches in interprofessional masters programs in health systems and health care architecture and mentors students in her college’s interprofessional doctoral program.

Karen J. Saewert, PhD, RN, CPHQ, CNE, ANEF is a co-investigator on a 3-year grant funded by the Josiah Macy Jr. Foundation to develop and evaluate an interprofessional primary care curriculum. Her work focuses on: assessment and evaluation in support of teaching and learning excellence; design, delivery, and evaluation of curricular innovations; and, interprofessional education emphasizing teamwork, quality and safety, and patient-centered care. She currently teaches academic and practice based program production and evaluation.
Development of the Team Competencies Instrument: A Behaviorally Based Instrument for Assessing Team Proficiency

Oral Presentation

- Andrea L. Pfeifle, University of Kentucky, Lexington, KY, USA
- Amy Blue, University of Florida, Gainesville, FL, USA
- Amy E. Leaphart, Medical University of South Carolina, Charleston, SC, USA
- Erik Black, University of Florida, Gainesville, FL, USA

Submitted abstract:

**Background and Objectives:** A developmental approach to the acquisition of interprofessional collaborative competencies obliges us to create and use complimentary assessment methods. The Team Competencies Instrument (TCI) was developed at the Medical University of South Carolina (MUSC) in 2008 to enable students to assess team behavior in non-clinical learning settings. The purpose of this session is to describe how the TCI was piloted, psychometrically examined and subsequently modified to assess team behaviors through a process of iterative sharing between three institutions.

**Methods:** The TCI assesses three domains of team behavior through 18 items: contributes to achieve group task; maintains positive group communication; displays positive attitude. Content validity was established by a group of IPE faculty. The University of Kentucky (UK) adapted the instrument (TCI 1.1) to enable individual self and peer feedback. Data were examined psychometrically and analyzed using factor analysis (varimax rotation, n=1251). Results of the factor analysis at UK confirmed three factors. Subsequently, in response to student and faculty input, the TCI was further revised and collapsed into three items, each representing one of the domains. The revised instrument (TCI 2.0) was implemented at MUSC (n=417) and University of Florida (n=619).

**Results:** Loadings of each item on the TCI 1.1 ranged from .518 to .835 and identified three factors (Contributes to Achieving Group Tasks, Attitudes, and Group Communication) with Chronbach’s Alpha reliability of .897, .888 and .848 respectively. Results of TCI 2.0 demonstrated high reliability (.893), loading on one general factor of team behavior.

**Implications:** For pre-clinical learning contexts, the TCI 2.0 appears to serve as a practical approach for teaching and assessing team behaviors in non-clinical settings. Inter-institutional testing of TCI 2.0 demonstrated that the three-item instrument reliably assess team behavior. This demonstrates the utility and importance of inter-institutional collaboration to develop instruments to assess interprofessional competencies.

**Author Biographies**

James Ballard, MS is the Associate Director of the University of Kentucky Center for Interprofessional HealthCare Education research and Practice. Mr. Ballard received a B.A. in psychology from the University of Notre Dame and an M.S. in educational psychology from the University of Kentucky. Currently he is pursuing a doctoral degree in educational leadership. His professional interests include adult cognitive and intellectual development, interprofessional bias and stereotyping, experiential education, and achievement motivation among adult learners.

Erik W. Black, Ph.D. is Assistant Professor of Pediatrics and Educational Technology, University of Florida College of Medicine. Dr. Black earned his BS from Virginia Tech, MA from the College of New Jersey and PhD from the University of Florida. He engages in teaching and research related to interprofessional
education across the six health science colleges at the University of Florida. In addition Dr. Black conducts research on topics related to children’s health and technology.

Amy V. Blue, PhD: Dr. Blue is the Associate Vice President for Interprofessional Education at the University of Florida (UF) and has been engaged in IPE program development for several years, including establishment of the IPE program at the Medical University of South Carolina and the development of the instrument described in this session. Dr. Blue represents UF in the Southeastern Consortium (SEC) for Interprofessional Education (IPE) project funded by the Josiah Macy Jr. Foundation.

Andrea L. Pfeifle, EdD PT: Dr. Pfeifle is the Director of the University of Kentucky (UK) Interprofessional Education, Research, and Practice Center and has been engaged in IPE program development for several years, including the establishment of the IPE program at UK and subsequent application/revisions of the instrument described in this session. Dr. Pfeifle is the Principle Investigator in the Southeastern Consortium (SEC) for Interprofessional Education (IPE) project funded by the Josiah Macy Jr. Foundation.

Amy Leaphart is the Program Manager for the Office of Interprofessional Initiatives at the Medical University of South Carolina. She has an MA in English and Literature, an MS in Health and Exercise Science, and 15 years experience teaching in the humanities, social sciences, and health professions education. Currently, she serves as the course director for IP710: Transforming Healthcare for the Future, the required interprofessional education course involving over 800 students per year.

4K. Crew Resource Management and TeamSTEPPS Approaches for Measuring Interprofessional Competencies in Teamwork Simulations

Panel Presentation

Program abstract: This session provides overviews and video demonstrations of interprofessional team simulations along with TeamSTEPPS and Crew Resource Management to measure teamwork behaviors and skills. The panel provides lessons learned during development, deployment and empirical evaluation that will be useful to institutions interested in developing their own simulations.

- David Dickter, Western University of Health Sciences, Pomona, CA, USA
- Elizabeth Speakman, Thomas Jefferson University, Philadelphia, PA, USA
- Christine Arenson, Thomas Jefferson University, Philadelphia, PA, USA
- Brian Ross, University of Washington Medical Center, Seattle, WA, USA
- Brenda Zierler, University of Washington, School of Nursing, Seattle, WA, USA
- Andrea L. Pfeifle, University of Kentucky, Lexington, KY, USA
- Sarah Shrader, University of Kansas, Lawrence, KS, USA

Submitted abstract:

Background: Widespread adoption of team-based strategies remains limited by perceived and actual barriers at the institutional, program, faculty, and student levels. In addition, IPE researchers have noted the dearth of published evaluation tools for directly observing and measuring teamwork behaviors and skills. Recently several institutions have developed effective, replicable interprofessional team simulations to provide education, individualized feedback, and data for IPE program evaluation. So that other institutions might develop their own simulations, this symposium will provide overviews and engaging video demonstrations, as well as lessons learned in the development, deployment and evaluation of teamwork simulations in healthcare.
Objectives: In this session we will discuss how to incorporate students from multiple professions into simulation activities whether using high-fidelity simulators or standardized patients. Specifically, we will demonstrate how we have operationalized specific TeamSTEPPS and Crew Resource Management competencies pertaining to leadership, communication, situation awareness, problem solving, and decision making. We will also demonstrate how to translate these competencies into measurable skills and behaviors for individual performance evaluation.

Methods: This presentation will explore how interprofessional teams can gain a repertoire of collaboration skills to improve and promote safe patient care and positive patient outcomes. Our goal is that students will continue to use the TeamSTEPPS communication techniques in their practice when they graduate. Using both video excerpts and interactive discussion, we will address approaches to measurement using both high-fidelity simulators and OSCE (Observed Structured Clinical Examination) scenarios involving standardized patient actors. Procedures and tools for student preparation for the simulation activities as well as performance feedback will be shared.

Results: Empirical findings have been encouraging. In one study, the student team was able to outperform “professional” teams in specific outcome metrics associated with cardio-pulmonary resuscitation. In another study, students who participated in interprofessional coursework outperformed on a collaboration competency rubric relative to a peer group at the same institution who did not participate in the courses.

Implications: This session incorporates the conference themes of educational redesign to prepare a “collaboration ready” healthcare workforce and technology applications. Attendees will gain an understanding of the logistical issues in incorporating interprofessional, team-based simulations into student education. An interactive environment will be created through the discussion of challenges encountered and lessons learned. Though changing behavior and modeling good teamwork, we hope to change the medical culture to a more team-centric, less hierarchical model with effective interprofessional collaboration to create a safer healthcare system for our patients. Attendees will gain knowledge about how to implement or refine simulations in teamwork training that lead to a more collaborative, safer healthcare delivery system.

Author Biographies

David N. Dickter, PhD is Director, Interprofessional Education Research and Strategic Assessment at Western University of Health Sciences. He leads the development and implementation of assessment programs to evaluate IPE programming, including the design of assessment tools and systems. Prior to WesternU, he spent over 20 years developing and validating psychometric assessments for use in education and the workplace. He earned his Ph.D. in industrial/organizational psychology from Ohio State University.

Elizabeth Speakman, EdD, RN, CDE, ANEF, is Co-Director of the Jefferson Interprofessional Education Center and Associate Professor in Nursing at Thomas Jefferson University. Dr. Speakman is an Academy of Nursing Education Fellow, and a Robert Wood Johnson Foundation Executive Nurse Fellow. She has been a nurse educator for 28 years with over 75 national presentations. Dr. Speakman received a BS in Nursing from Wagner College, and her Masters and Doctorate in Education from Columbia University.

Christine Arenson, MD, is Co-Director, Jefferson InterProfessional Education Center and Vice Chair for Academic Affairs in the Department of Family and Community Medicine at Thomas Jefferson University. Dr. Arenson’s research interests include improving systems of care, including self-management.
strategies, for older adults with chronic conditions and evaluation of novel interprofessional education activities.

Brenda Zierler, PhD, RN, FAAN, is Professor in Biobehavioral Nursing and Health Systems at the University of Washington; Co-Director Center for Health Sciences Interprofessional Education, Practice and Research; and Associate Director of the Institute for Simulation and Interprofessional Studies. As co-principle investigator of a Macy Foundation-funded study Dr. Zierler leads a group of interprofessional faculty and students in the development of a simulation-based, team training program to improve collaborative interprofessional communication.

4N. Collaborative Practitioners: Successes and Challenges of growing the next generation through contemporary practice placements

Roundtable Discussion

Program abstract: Developing practice based education to support the development of the next generation of health and social care practitioners has been the basis for a Scottish cross sector/interprofessional partnership. This roundtable will draw on the collective wisdom of those interested in applying interprofessional models into practice to shape thinking regarding barriers/opportunities.

- **Jenny Miller**, NHS Education for Scotland, Dundee, Scotland, UK
- **Karen Allan**, NHS Education for Scotland, Aberdeen, Scotland, UK
- **Edith Macintosh**, Care Inspectorate, Dundee, Scotland, UK
- **Gail Nash**, NHS Lothian, Edinburgh, Scotland, UK
- **Alison MacIntyre**, NHS Tayside, Dundee, Scotland, UK
- **Jenny Whinnett**, PAMIS, Aberdeen, Scotland, UK

Submitted abstract:
Core to Scottish and worldwide health and social care policy is the need to develop a workforce that is able to work collaboratively across professions, sectors and specialties. (Scottish Government (SG) 2011, 2013, 2013b; World Health Organisation (WHO), 2013). Current worldwide economic and demographic issues make this an absolute necessity as does the increasing complexity of health and social care. The vision of an ‘assets based approach’ to the planning and delivery of health and social care, involving at the heart those who use services along with their carers is a suggested solution. Coproduction recognises that service users have assets such as their families, their communities but also their knowledge and skills and therefore can have resources that they can draw upon to support their own health and well being. This is a fundamental shift in culture for both service users and the health and social care services. It is an approach that is growing in momentum but is strongly reliant on a workforce that is able to engage in a different way. Therefore education that supports interprofessional, collaborative and partnership working is essential for both the current and future workforce in health and social care, (WHO 2010, 2013, SG 2013, 2013b)

NHS Education for Scotland (NES) is a special Health Board that supports the education and development of those who work in and with the National Health Service in Scotland. The NES Allied Health Professions (AHP) Practice Education Facilitation (PEF) Programme is a core programme within NES and has a dedicated workstream to the advancement of preregistration AHP practice education. Within this work there have been cross sector small cycle change projects that have supported a move to contemporary practice placements. The aims of these have been to further support practice based education that will
give AHPs the skills, knowledge and confidence that will enable them to work in partnership with others, including those who use their services and their carers, to deliver integrated, safe, effective and person centred service. This work has supported partnerships with a number of third sector and social sector partners and models for future practice placements have been established.

Although evaluated highly by the learners and those providing the placements there are challenges associated with putting this learning into the wider practice.

This round table discussion will share the pilot work and through utilising the world cafe methodology (Brown and Isaacs 2005) it will engage the group in discussion about barriers to the wider implementation of this learning. The World Cafe approach recognises that everyone will see something different defined by who they are and their position in the system. It acknowledges that having many different perspectives and experiences gives the group the information to make good decisions. The collective wisdom of international colleagues with an interest in applying interprofessional learning into practice will shape thinking and coordinate subsequent actions as a collective community.

40. RAVEN (Reduce Avoidable Hospitalizations Using Evidence-Based Intervention for Nursing Facilities)—A CMS Innovation Project

Panel Presentation

Program abstract: RAVEN, a CMS Innovation Project of UPMC Community Provider Services (Aging Institute) has been implemented in 19 skilled nursing facilities in western Pennsylvania. Using nurse practitioners, focused assessment/communication tools, innovative education models, enhanced pharmacy engagement, and telemedicine technology that enables remote clinical assessment, RAVEN aims to reduce avoidable hospital admissions and readmissions, improve beneficiary health outcomes, provide better transitions in care, and lower costs in the care of long-stay Medicare-Medicaid residents. The nurse practitioners are trained in gero-palliative care and program development that supports integrating services into the natural inter-professional disciplines and practices that occur within each facility. Pilot data showed a reduction in unplanned transfers from 5.9 per 1000 resident days to 2.1. RAVEN’s goal is to replicate and extend these findings across a broad array of SNFs.

- Charles F. Reynolds III, Aging Institute of UPMC Senior Services and the University of Pittsburgh, Pittsburgh, PA, USA
- Kathryn M. Lanz, UPMC, Pittsburgh, PA, USA
- Steven M. Handler, UPMC, Pittsburgh, PA, USA
- Scott Stephens, UPMC/RX Partners, Inc, Pittsburgh, PA, USA
- Nancy Zions, Jewish Healthcare Foundation, Pittsburgh, PA, USA
- Mary Ann Sander, UPMC, Pittsburgh, PA, USA

Submitted abstract:

Background: Approximately 45% of hospitalizations among long-stay nursing facility residents are potentially avoidable, resulting in approximately $3 billion dollars in Medicare expenditures. Nearly 20% of Medicare beneficiaries return to hospital within a month after discharge. 90% of readmissions within 30 days are unplanned. Poor continuity of care after discharge from hospital leads to readmissions. Poor care coordination was responsible for $25-45 billion in wasteful healthcare spending in 2011. CMS donated $10 billion to assist with testing new models of care, including funding from CMMI for this initiative, through a CMS cooperative initiative to the Aging Institute of UPMC.
**Objectives:** RAVEN’s objectives are to reduce the number and frequency of avoidable hospital admissions and readmissions; to improve beneficiary health outcomes; to provide better transitions of care; and to promote better care at lower costs while preserving access to beneficiary care and providers. Culture change that integrates the inter-professional team expertise and communication is a long-term goal.

**Methods:** RAVEN focuses on long-stay (101+ day) Medicare-Medicaid residents in 19 nursing facilities in western Pennsylvania. The UPMC Aging Institute, in collaboration with the Palliative and Supportive Institute, is designated as the “Enhanced Care and Coordination Provider” (ECCP). Its operating partners are Excela Health, Heritage Valley Health System, the Jewish Healthcare Foundation, and Robert Morris University. RAVEN integrates five core programmatic elements: (1) facility-based nurse practitioners/enhanced care nurses, (2) assessment and clinical communication tools, (3) innovation education (Jewish Healthcare Foundation, Robert Morris University, and Pitt’s Geriatric Education Center), (4) enhanced medication management, monitoring, and pharmacy engagement, and (5) use of telemedicine and information technologies that enable remote clinical assessment and facilitate communication. The evaluation of RAVEN’s impact will occur via the use (1) a CMS data tool (addressing mortality, turnover, acute changes, time spent, interventions, and hospitalizations); (2) a long term care progress note, (3) an acute care transfer tool (root cause analysis); (4) a patient encounter form; (5) a telemedicine survey (clinician and resident); and (6) pharmacy recommendations and triggers.

**Results:** To date RAVEN has rolled out service in all 19 nursing facilities divided into 5 cohorts. This effort has involved the orientation, mentoring, and support of 30 clinicians and 18 administrative and support staff. Paramount among the challenges encountered in the first year of RAVEN’s rollout have been the relatively high proportion of managed Medicare residents in western Pennsylvania (who are not eligible to participate), the complexity and diversity of approaches to data management, the complexity (and attendant attrition) of the enhanced care staffing role, community physician engagement/buy-in, and achieving integration of all components of RAVEN to make the whole greater than the sum of the parts.

RAVEN is built upon feasibility/pilot data which showed a reduction in unplanned transfers/1000 resident days from 5.9 to 2.1 over a two year period in UPMC-owned facilities. RAVEN now seeks to extend and test the ecological validity and utility of the model across a broad continuum of non-UPMC owned NF’s in western PA. We expect similar if not better results once RAVEN is fully implemented. RAVEN continues to build collaborations and relationships to ensure its success, to incorporate telemedicine, palliative education, and psychotropic drug initiatives, to create professional development plans for staff in collaboration with stakeholders, and to evaluate outcomes that are key to stakeholders (including CMS, facilities, community MDs, hospitals/systems, and state/community

**Implications:** Early indications are that RAVEN models a viable approach to humane reduction in avoidable admissions and readmissions to hospital of NF residents. RAVEN appears consonant with patient and family values and goals for care. It illustrates the power of a multidisciplinary team of nurse practitioners, pharmacists, IT experts, physicians, payors, and administrators to achieve better care at lower cost in the nation’s most vulnerable elderly. Plan to create an interactive environment for session: Rather than having a series of individual presentations, the moderator of the session (Dr Reynolds) will pose a series of questions to panelists, who bring to bear broad transdisciplinary and translational perspectives on complex challenges of developing and implementing new models of interprofessional practice and team-based care. These questions will address several issues: (1) the components of
RAVEN and the rationale for each component, (2) delineation of challenges confronted and overcome, and (3) qualitative and quantitative outcomes to date. In addition, Dr. Reynolds will invite questions and comments from audience participants, to foster a conversation, rather than a series of lectures.

**Author Biographies**

- **Moderator:** Charles F. Reynolds III, M.D., UPMC Endowed Professor in Geriatric Psychiatry and Director, UPMC/Pitt Aging Institute; RAVEN co-project director
- **Speaker 1:** Kathryn Lanz, D.N.P., UPMC Director of Geriatric Services, expert in gero-palliative care, RAVEN co-project director
- **Speaker 2:** Steven Handler, M.D., Ph.D., Assistant Professor in Geriatric Medicine and Biomedical Informatics, expert in IT
- **Speaker 3:** Scott Stephens, RPh, FASCP, Clinical Pharmacy Manager, RX Partners,
- **Speaker 4:** Nancy Zions, MBA Chief Operating and Chief Program officer, Jewish Healthcare Foundation, education innovation in RAVEN
- **Speaker 5:** Mary Ann Sander, Vice President, Aging and Disability Services, UPMC Community Provider Services
- **Speaker 6:** Evan T. Shulman, Technical Director, Center for Medicare and Medicaid Services

**4P-1. International Classification of Functioning, Disability and Health (ICF): A framework for transformative interprofessional education**

**Oral Presentation**

- **Stefanus Snyman,** Stellenbosch University, Stellenbosch, Western Cape, South Africa
- **Klaus von Pressentin,** Stellenbosch University, Stellenbosch, Western Cape, South Africa
- **Marina Clarke,** Stellenbosch University, Stellenbosch, Western Cape, South Africa

**Submitted abstract:**

**Background:** To promote health equity, focus is needed on providing patient-centred and community-based care. This challenges educationists to advocate for instructional and institutional reform, including the advancement of interprofessional education (IPE). To enhance patient-centred interprofessional care, the WHO recommends using the framework of the International Classification of Functioning, Disability and Health (ICF). Stellenbosch University’s IPE strategy has promoted the ICF since 2010. Students use this framework in approaching and managing their patients. When presenting patients using the ICF, they are assessed by an interprofessional healthcare team.

**Objectives:** This study aimed to evaluate how using the ICF was experienced by medical students, facilitators of learning and patients; and how applying the ICF framework contributed to instructional reform, institutional reform and interprofessional practice.

**Methods:** Associative group analysis was used to conduct this study, assessing spontaneous free word associations given by different groups in response to specific questions. The groups in this study consisted of medical students (37), facilitators of learning (18) and patients (15). During a systematic analysis of the responses, themes were formed and interpreted.

**Results:** Students found the ICF assisted them to adopt a patient-centred approach. Patients experienced healthcare received positively: being listened to and cared for. Facilitators reported being indirectly challenged to apply the ICF framework themselves resulting in patient-centred and interprofessional care. This enhanced teamwork and job satisfaction.
Implications: Assessment of student presentations using the ICF was the driver to encourage interprofessional practice among students and health professionals resulting in improved patient outcomes. The ICF framework as interprofessional approach facilitates patient-centred care.

4P-2. Effect of Interprofessional Education (IPE) on Interprofessional Collaboration (IPC) Among Nursing and Occupational Therapist Assistant and Physiotherapist Assistant (OTA/PTA) Students During Their Clinical Experiences

Oral Presentation

- Michelle Hughes, Centennial College, Toronto, ON, Canada
- Audrey Kenmir, Centennial College, Toronto, ON, Canada
- Lynda Attack, Centennial College, Toronto, ON, Canada
- Pat Lee, Centennial College, Toronto, ON, Canada

Submitted abstract:

Objectives

1. Discuss interactive educational interventions developed to promote interprofessional learning amongst healthcare students.
2. Review the impact the educational interventions had on the students’ learning in their first and second clinical experiences.
3. Identify strategies for faculty to improve interprofessional collaboration for healthcare students within program curriculae.

Background: Healthcare teams who are knowledgeable about each other’s roles deliver higher quality care through collaboration. A majority of students are educated in uni-disciplinary curricula with minimal opportunity to learn about and from another discipline. To create interprofessional opportunities, Nursing and OTA/PTA faculty developed and implemented interprofessional educational sessions on role clarification, collaboration and communication. Research was conducted to examine the effects of IPE on students’ engagement in IPC during their first and second clinical experience.

Methods: A quasi-experimental study using surveys and focus group interviews was conducted to measure changes in students’ perception of the interprofessional competencies and the impact the educational initiative had on their clinical experiences.

Results: Students perceived they had demonstrated more positive attitudes related to interprofessional practice. After the first clinical experience, focus group data suggested this was because of increased role recognition, of own profession and other professions, and perceived skill enhancement through shared learning. Data collected after the second clinical experience highlighted an enhanced awareness of roles, improved sense of value of and need for IPE and IPC, and increased opportunity to apply IPE knowledge to effectively engage in IPC.

Implications: With each clinical experience, evidence supports that IPE enhances awareness of one’s own role and others. Knowledge about roles and skills of other professions had a positive impact on students’ attitudes and confidence to engage in IPC. This change in perspective encourages collaboration that supports optimal client-centered outcomes.

Author Biographies
Audrey Kenmir, R.N., BScN, MN is a Professor at Centennial College in Toronto and has been teaching for over 20 years in the Ryerson, Centennial, George Brown Collaborative Nursing Degree and the Practical Nursing Programs.

Michelle Hughes, R.N., BScN, MEd is also a Professor at Centennial College and has been teaching for over seven years in the Collaborative Nursing Degree Program.

Audrey and Michelle have been members of Centennial’s IPE committee since it was established in 2010 and members of the Canadian Interprofessional Health Collaborative (CHIC) since 2011. They have actively been engaged in various IPE & C research projects and have received grants to support their IP research. Audrey and Michelle have presented their IPE&C projects nationally and internationally.

4P-3. Interprofessional student-assisted rehabilitation service for rural, remote and indigenous populations – an innovative service-delivery model

Oral Presentation

- Ruth Barker, Community Rehabilitation Northern Queensland, Townsville, Queensland, Australia
- Cindy Sealey, James Cook University, Townsville, Queensland, Australia

Submitted abstract:

Background: Interprofessional service delivery is essential when providing healthcare to widely dispersed communities that have few medical and allied health services. In northern Queensland, Australia, a novel interprofessional, student-assisted community rehabilitation service was established for people with neurological conditions who live in regional, rural, remote and indigenous communities. Community Rehabilitation northern Queensland was designed to address unmet need, build workforce capacity and research capacity with respect to service provision within the northern Queensland context. A key challenge was to provide a sustainable and responsive service for a population of approximately 700,000 people dispersed over an area of approximately 700,000 km². Established in 2012 as a collaborative project between James Cook University and Townsville Mackay Medicare Local, Community Rehabilitation northern Queensland offers an exemplar of inter-professional service and education.

Objectives: This presentation will outline the development, implementation and evaluation of Community Rehabilitation northern Queensland and the interprofessional, student-assisted model under which it operates.

Methods: A series of pilot trials tailored to the needs of people from northern Queensland were conducted. Based on the recommendations made, a plan for a sustainable and responsive community rehabilitation service was developed using an iterative process of planning, consultation with stakeholders, data gathering, data analysis and compilation of a service model. The service was then established and a process, impact and outcome evaluation completed from the perspective of the participants, students and staff of the service.

Results: CRnQ was established according to plan, target activity levels were met and significant outcomes achieved with respect to the service, student education and research capacity.
Implications: This presentation provides an example of the establishment of a community rehabilitation service which operates according to an interprofessional model of care. The lessons of those on the ground can provide insight for other healthcare professionals envisioning a similar endeavour.

Author Biographies
Dr Ruth Barker is the Clinical Leader of Community Rehab nQ and an Adjunct Lecturer at James Cook University. Ruth is a Physiotherapist with a PhD in the field of stroke rehabilitation, a Masters of Arts (Aboriginal Studies) and extensive experience working as a physiotherapist and researcher in metroPolitan, rural and remote Indigenous communities throughout Australia.

Ms. Cindy Sealey is the Interprofessional Practice and Curriculum Development Research Officer at James Cook University and Community Rehabilitation northern Queensland. Cindy has an Honours degree in Psychology and is currently working on embedding interprofessional education and learning both at Community Rehab nQ and across the health and social care disciplines at James Cook University.

4P-4. Telehealth – Increased access to an Interprofessional Team

Oral Presentation

- Matt Elrod, American Physical Therapy Association (APTA), Alexandria, VA, USA
- Katie Stout, Former Army Telehealth
- Patricia Burtoft, Former Army Telehealth

Submitted abstract:

Background: Telehealth is a relatively new clinical model being investigated across the US. Telehealth was previously used globally and proven as a clinical tool to improve access, decrease wait times, and improve clinical outcomes. Starting in 2008, the US Army began piloting interprofessional Telehealth teams for US service members. Since 2008, utilization of interdisciplinary Telehealth teams has proven to streamline care and improve access to specialty clinics across the Army. The use of these interprofessional teams includes medical and rehabilitation provider’s assessment, treatment, and progression of the patient’s plan of care in a multi-disciplinary environment.

Objectives:
1. Identify the current technology used for telehealth and the discipline-specific needs to consider when working with an interdisciplinary team.
2. Discuss clinic flow, coding, and scheduling for an interdisciplinary telehealth team
3. Describe start up challenges, marketing, and the success of using an interdisciplinary telehealth team

Methods: This panel will use lecture, case review, and audience participation. Results: After the presentation, the attendees will have a sound understanding of an interprofessional telehealth care team. Implications and the resources needed for those looking to start interprofessional telehealth teams will also be understood.

Implications: This panel will highlight the benefits of using an interprofessional telehealth team. Discussions will include descriptions of challenges encountered and how to overcome them; identification of technologies required for set up; and improved understanding of how much space is required to maximize the benefit of this type of team.
Author Biographies
Dr. Katie Stout headed up the Tele-TBI clinic with Defense Veteran's Brain Injury Center (DVBIC) in 2010-11. After a successful program with DVBIC then worked as the Telerehabilitation Chief from 2011-2013 for the Army's Northern Region Medical Command.

Patricia Burtoft, PA started her work in telehealth initiating the Teleneurosurgery program at Ft. Knox in conjunction with Walter Reed Army Medical Center. After she successfully started the mid level support to the Teleneurosurgery program, she served as supervisory PA and successfully initiated the Tele-Headache clinic with Defense Veteran's Brain Injury Center and continued to expand the services during her tenure from 2008-2013.

4Q-1. The SCRIPT Project: Successful Collaborative Relationships in Patient care – pharmacist integration into the medical home

Oral Presentation

- Maria Osborne, UPMC St. Margaret, Pittsburgh, PA, USA
- Sarah Krahe Dombrowski, UPMC St. Margaret, Pittsburgh, PA, USA
- Kavitha Bhat-Schelbert, UPMC, Renaissance Family Practice, Pittsburgh, PA, USA

Submitted abstract:
Background: Primary care in the United States is an endangered form of practice as physicians face challenges coordinating patient care to meet quality practice standards and control healthcare costs. Medication-related problems are a significant part of this cost as medication regimens become more complex. Potentially serious drug interactions and adverse reactions, incorrect medication administration by patients, and adherence issues create the unprecedented need for medication therapy experts to help manage individualized medication therapy and provide more frequent follow up. Numerous studies have demonstrated the positive impact pharmacists can have on the outcomes of medical care. However, the cost utility of inclusion of a pharmacist as a member of the primary care team in a physician practice has yet to be shown in a replicable format.

Objectives: The objective of this presentation is to share the process of pharmacist integration from the SCRIPT (Successful Collaborative Relationships to Improve Patient Care) medical home research study being conducted in Pittsburgh, Pennsylvania, and to discuss preliminary results from a correlating research study investigating payment models utilized throughout the United States by health plans and non-academic, outpatient primary care practices to justify incorporation of pharmacists into the patient-centered medical home (PCMH).

Methods: The presentation will include an outline of the SCRIPT study, a case presentation to illustrate pharmacist and physician collaboration in the PCMH, and a summary of “best practice” financial models to support pharmacist integration into the PCMH.

Results: Pharmacist integration in the healthcare team at the SCRIPT practices has positively impacted the practices through educational and time-saving benefits, patient empowerment, and improved quality measures.

Implications: Understanding the process of incorporating pharmacists into the PCMH and identifying “best financial practices” for the pharmacist integration into non-academic PCMHs can serve as a template for the growth of the pharmacist in these settings.
Author Biographies

Maria A. Osborne, PharmD, BCACP works as a clinical pharmacist within two UPMC St. Margaret Family Practice offices involved in the SCRIPT Project (Successful Collaborative Relationships to Improve Patient Care) which is a medical home research study being conducted in Pittsburgh, PA, and contributes to the overall design and conduct of the research project. Her practice includes provision of individual medication therapy management, medication reconciliation post-hospital/emergency room discharge, and collaborating with physicians in overall patient management.

Sarah Krahe Dombrowski, PharmD is a PGY2 Pharmacy Resident in family medicine with UPMC St. Margaret in Pittsburgh, PA. She also completed a PGY1 Community Pharmacy Residency with Rite Aid. Her responsibilities in the Family Health Center include improving patients’ access to medications, investigating and targeting medication adherence, and collaborating with physicians to optimize patients’ medication regimens. Her residency research project has involved investigating financial models utilized throughout the country to integrate pharmacist into outpatient primary care practices.

Kavitha Bhat Schelbert MD, MS was Assistant Professor in the Department of Family Medicine, University of Pittsburgh School of Medicine. She has experience directing multidisciplinary teams. She directed the University of Iowa Weight Management Clinic, and the directed the Primary Care Clinic at Western Psychiatric Institutes and Clinics, where she managed a patient-centered medical home for the seriously mentally ill. She currently works as a family physician at the UPMC-Renaissance Family Practice.

4Q-2. Understanding Oral-Systemic Health and Culture: Bringing It All Together

Oral Presentation

- Maria Dolce, Northeastern University, Boston, MA, USA
- Pamela Ring, Northeastern University, Boston, MA, USA
- Ashwini Ranade, Northeastern University, Boston, MA, USA
- Kathryn Robinson, Northeastern University, Boston, MA, USA

Submitted abstract:

Background: Significant oral health inequities persist for vulnerable and underserved populations, particularly American Indians. American Indians experience poorer oral health than the overall U.S. population across the life cycle. This population faces barriers to achieving optimal oral health based on a complex array of geographic, economic, and cultural issues which are distinct to their population. Understanding these barriers is the first step to addressing oral health inequities, and the important connection between oral health and overall health.

Objectives: The aim of this presentation is to describe the experiences of allied health students collaborating with dental students and faculty in a community outreach program to better understand the oral-systemic health needs of a local American Indian population.

Methods: Faculty and students from Bouvé College of Health Sciences at Northeastern University participated in Harvard School of Dental Medicine’s community outreach to the Wampanoag Tribe of Gay Head (Aquinnah) on Martha’s Vineyard, Massachusetts. Health students from nursing, pharmacy, and behavioral health, collaborated with dental students in planning, coordinating and implementing a community outreach to the tribal community. Allied health students teamed with dental students in conducting oral health screenings, risk assessments, and health histories. Students interacted with tribal
community members, including children, adolescents, adults and older adults, providing oral-systemic health information and counseling about healthy personal behaviors.

**Results:** The community outreach program enhanced students’ understanding about oral-systemic health, diverse barriers to achieving optimal oral health, and the importance of cultural humility in addressing oral health inequities for American Indians. Building trusting relationships with the community and team members was foundational to this program’s success.

**Implications:** Bringing together students and faculty across health professions to engage in community outreach is an effective interprofessional education strategy to promote cultural humility in improving oral-systemic health for vulnerable and underserved individuals, communities, and populations.

4Q-3. Interprofessional Collaboration for Oral Health Care: Bringing Students and Faculty Together for Success

*Oral Presentation*

- **Margaret Thorman Hartig,** University of Tennessee Health Science Center, Memphis, TN, USA
- **Cesar Augusto Migliorati,** University of Tennessee Health Science Center, Memphis, TN, USA
- **Cassandra Holder-Ballard,** University of Tennessee Health Science Center, Memphis, TN, USA
- **Teresa Britt,** University of Tennessee Health Science Center, Memphis, TN, USA

**Submitted abstract:**
The interprofessional (IPE) course “Collaboration for Oral Health Care” is a joint effort among Doctor of Nursing Practice (DNP), Dental and Dental Hygiene students and faculty at The University of Tennessee Health Science Center. Students enrolled in a one-credit elective course emphasizing attainment of IPE competencies, oral examination skills and integration of technology into clinical care. Students participate in classroom content and discussion with an additional eight hours of online didactic credit, simulation experiences with standardized patients and clinical experiences. Ten student teams of one DNP, dental and dental hygiene student in each team provide care in three clinical situations separately managed by APNs and physicians, dentists and dental hygienists. Clinical experiences include expectations for student interaction, skill acquisition and integration of technology into patient care and education. HRSA grant funding supported the distribution and use of the iPad miniTM for both practice and patient education. Students used the course-provided iPad miniTM to access evidence-based guidelines for care and patient education programs for on-site explanations to guide patients in developing and maintaining good dental care habits.

Course evaluation identified this as the first IPE experience for 78.6% of the students. Students overwhelmingly agreed the instruction was well coordinated among the faculty members from the three professions. Students also overwhelmingly agreed as to the benefits of the course for their educational experience in general, ability to work in teams and understanding of and respect for other professional roles. The desire for additional clinical experiences with the team was a common request among students evaluating the course.

The presentation describes this initiative to expand the workforce to address oral care while increasing student awareness of varied health providers. IPE competencies are defined. Specific examples of didactic resources, clinical experiences and technological integration will be discussed, as well as plans for ongoing sustainability.
4Q-4. Collaborating to Foster New Interprofessional Teams: Case Study of a Multidisciplinary Academic Consortium to Advance Inclusion of Licensed Complementary and Alternative Medicine Professions

Oral Presentation

- **John Weeks**, Academic Consortium for Complementary and Alternative Health Care, Seattle, WA, USA
- **Elizabeth Goldblatt**, Academic Consortium for Complementary and Alternative Health Care, Seattle, WA, USA

Submitted abstract:
A characteristic of the movement for interprofessional care and education (IPC/E) is its team-based, patient-centered approach. Surveys show that, depending on the condition, between 35% and 70% of the patients with different chronic conditions use some “complementary or alternative medicine (CAM)” treatments. The related educators and practitioners are thus a vital resource for the team care movement. Yet the roughly 375,000 members of the licensed U.S. work force who are most experienced with these integrative, patient-driven services are still rarely included in conventional medical teams. In 2005, educators from five disciplines – acupuncture and Oriental medicine, chiropractic, naturopathic medicine, massage therapy and direct-entry midwifery – formed a consortium principally to bridge relationships with mainstream education and delivery.

The Academic Consortium for Complementary and Alternative Health Care (ACCAHC) is a rich internal collaboration that has since been engaged with many of healthcare’s acronyms: NIH, WHO, HRSA, IPEC, IOM (Pain), CAB III-IV, NCIPE, PCORI, IOM (Global Forum on Innovation in Health Professional Education), PAINS, plus multiple collaborations with a separate consortium of 54 medical schools with integrative medicine programs.

This session will share ACCAH C’s: functional collaboration; structural mechanisms for maintaining “horizontal” relations; collaboratively prioritized projects; initiatives on evidence-informed practice and the Triple Aim; new inclusion under the ACA; measurable outcomes; and how ACCAH C assists THE CAM educators and clinical training programs to focus more on IPC/E competencies and skills.

Different disciplines are in different stages of a readiness for engagement. These five disciplines have historically been in pure silos. Attendees will learn of this step-wise strategy to enhance the IPC/E ethic among educators and practitioners from these disciplines and develop the KSAs to be team players and change agents for the values and practices associated with the whole person, patient-centered movement to transform medicine toward a model focused on prevention, health creation and well-being.

Author Biographies
John Weeks is a leading organizer of multidisciplinary and multi-stakeholder initiatives in the emerging integrative health and medicine field. He developed the Integrative Medicine Industry Leadership Summits, fund-raised the start-up of the Integrative Healthcare Policy Consortium, directed the National Education Dialogue to Advance Integrated Health Care, and co-founded and currently directs ACCAH C. Weeks advised on integrative health matters for NIH NCCAM, BPHC, WHO, Health Forum, and the HRSA-funded Integrative Medicine in Preventive Medicine.
Elizabeth A. Goldblatt, PhD, MPA/HA, a leading educator in acupuncture and Oriental medicine (AOM), is ACCAHC chair. She served as president of the Council of Colleges of Acupuncture and Oriental Medicine and president of the Oregon College of Oriental Medicine. Her commitment to IPC/E included fostering multiple relationships with Oregon Health Sciences University. Goldblatt has served on IOM committees for the Summit on Integrative Medicine and the Global Forum on Innovation in Health Professional Education.

4R-1. How to Enhance Online Interprofessional Learning: A unique inter-university collaboration to develop an interprofessional facilitator guide

Oral Presentation

- Carrie Krekoski-De Palma, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- Victoria Wood, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- Lynne Sinclair, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada
- Anne Godden-Webster, Dalhousie University, Halifax, NS, Canada
- Le-Ann Dolan, Victoria, BC, Canada

Submitted abstract:
Description: Several Canadian universities deliver online modules addressing rehabilitation in the context of HIV care and prevention. Participating universities collaborated to develop a facilitators guide that complements the modules, responds to various models of delivery and provides useful tools and strategies specifically for delivering the modules as part of an interactive (online or F2F), interprofessional learning experience.

Background/Rationale: The Canadian Working Group on HIV and Rehabilitation (CWGHR) developed a series of online modules addressing rehabilitation in the context of HIV care and prevention. The modules are a learning tool for pre-practice and experienced professionals. Over the past two years, a number of Canadian universities have delivered the modules. With a financial contribution from the Public Health Agency of Canada, a working group of educators from the participating universities came together to develop a facilitators guide to complement the CWGHR modules.

Methods: An initial draft of the guide was released to CWGHR module facilitators in August 2013. Each university utilizes and delivers the modules in unique ways. Partners were asked to provide feedback on the implementation of the guide in their context.

Results: The guide provides useful tools and strategies specifically for delivering the CWGHR modules as part of an interactive, interprofessional learning experience. While the modules can be used as part of an individual learning experience or with uni-disciplinary groups, the guide focuses on using the modules with interprofessional groups. The guide is divided into chapters so users can pick and choose the content most relevant to their needs, which means the guide can be used to support interprofessional learning focused on a broad range of areas related to chronic and complex disease management in relation to and beyond HIV. The guide includes tools and strategies for facilitating the interactivity that is necessary for effective interprofessional learning. The guide is designed to meet the needs of
facilitators and learners in a broad range of learning environments, including online, face-to-face and blended delivery.

**Conclusions:** This presentation will highlight the unique inter-institutional collaboration in the development of the CWGHR Facilitator Guide, along with examples of how the Guide was utilized and lessons learned along the way.

**4R-2. Establishing 'health professions literacy': Evaluation of a video-based learning package in a three-phase curriculum**

*Oral Presentation*

- Shirley Morrissey, Griffith University, Queensland, Australia
- Pit C. Chan, Griffith University, Health Institute for the Development of Education and Scholarship, Gold Coast, Queensland, Australia
- Emma J. Kerkow, University of Melbourne, Melbourne, Victoria, Australia
- Ben Desbrow, Griffith University, School of Allied Health Sciences, Gold Coast, Queensland, Australia

Submitted abstract:

**Background:** At ATBHVI we reported on the development of a three-phase pre-registration interprofessional curriculum and introduced the concept of ‘health professions literacy’ (HPL), which is a foundational understanding of the history, theoretical underpinnings, philosophy, roles and contributions of each of the major health professions, including the learner’s own. We postulate that prior acquisition of this literacy will enhance the effectiveness and efficiency of truly interprofessional learning (IPL) activities undertaken in the second (interprofessional practice simulation) and third (real patient or client care IPL) pedagogical phases of our curriculum.

**Objectives:** To determine the effectiveness of an online video-based learning package in establishing HPL.

**Methods:** We developed a package comprising an engaging, high-production-values, video narrative involving a man with multiple health risk factors who is involved in a car accident and then encounters 19 different health professionals before, during and after his hospital stay. Each professional encountered also provides HPL information on their profession in the form of a video interview. First year health professional students undertook a formative scenario-based pre-test to assess their HPL before the package was made available and a matching but different summative post-test one to three weeks after it was completed. Two tests were allocated as pre or post to randomly split halves of the class to ensure equivalence.

**Results:** 279 learners from a range of health professional programs completed both tests. Test equivalence was confirmed on the split halves analysis. The median score for the post-test was 17/20 compared with a median pre-test score of 14/20 (P<0.0001 by Wilcoxon matched-pairs signed-ranks test).

**Implications:** The video-based learning package had a statistically and educationally significant positive early impact on HPL. Further work will determine the longevity of this effect and its subsequent value in relation to the effectiveness of IPL experiences in later phases of the curriculum.
4R-3. Piloting the Interprofessional Team Assessment Program (ITAP): student reflections on observing healthcare teams in action

Oral Presentation

- Amy Corcoran, University of Pennsylvania, Perelman School of Medicine, Philadelphia, PA, USA
- Patricia Rogers, University of Pennsylvania, School of Nursing, Philadelphia, PA, USA
- Katharine A. Manning, University of Pennsylvania, Perelman School of Medicine, Philadelphia, PA, USA
- Cathy Poon, University of the Sciences, Philadelphia, PA, USA

Submitted abstract:
Background: Healthcare students have few, if any, opportunities for Interprofessional Education (IPE). The AAMC and other healthcare organizations have recognized the necessity for IPE to prepare healthcare students to provide high-quality, patient-centered care in their future careers.

Objectives: The goal of the Interprofessional Team Assessment Program (ITAP) is to provide a learning experience that allows medical, nursing, and pharmacy students to gain a deeper understanding of team dynamics and effectiveness through the eyes of each others’ professions by observing a healthcare team in action.

Methods: Nursing and pharmacy students merge with existing medical student teams to shadow a clinical healthcare team. After an introduction plenary and small group session, students spend a semester working together outside the classroom. Students make a final group presentation, and complete self-assessments and program evaluations.

Results: A total of 203 students participated in 2013. Results were based on self-assessment questionnaires given pre and post ITAP asking students to rate their level of confidence (from 1 - “Not very confident” to 5 - “Very confident”) in several domains. The percentage of students giving a rating of 4 or 5 in each domain changed as follows: ‘Participate as a highly collaborative member of a healthcare interprofessional team’ increased from 52.7% to 76.9%; ‘Describe the roles and responsibilities of other healthcare professionals’ from 31.5% to 73.2%; ‘Appreciate the defined mission and set of operating principles for a healthcare team’ from 32.0% to 65%; ‘Effectively coordinate and communicate as part of an interprofessional team’ from 49.8% to 80.3%. Themes from student responses regarding areas for continued personal improvement included communication, roles/responsibilities, and values.

Implications: Our findings suggest that students felt more comfortable with interprofessional collaboration and teamwork after the ITAP experience. Next steps involve further investigating the long-term impact of such an educational experience.

Author Biographies
Amy M. Corcoran, M.D. CMD is an Assistant Professor at the University of Pennsylvania. She combines her interests in teaching and practice as the Program Director of the Hospice and Palliative Medicine Fellowship and Aging Theme Leader in the Perelman School of Medicine. She is a current recipient of a Geriatric Academic Career Award renewal. Her major educational focus is in interprofessional education and she is working on a Master in Health Professions Education.
4R-4. Interprofessional learning to promote empathy: An interventional study

Oral Presentation

- **Brett Williams**, Monash University, Clayton, Victoria, Australia
- **Ted Brown**, Monash University, Clayton, Victoria, Australia
- **Lisa McKenna**, Monash University, Clayton, Victoria, Australia
- **Mal Boyle**, Monash University, Clayton, Victoria, Australia

Submitted abstract:

**Background:** Empathy is a vital characteristic for all medical and health care professionals. However, it is also a difficult characteristic to define, teach and assess. The ‘nebulous’ properties of empathic behaviour often means that educators fail to incorporate the explicit teaching and assessment of empathy within the curriculum. One solution suggested by a number of writers is that teaching empathy in an interprofessional education setting is an effective educational approach in developing empathic behaviours.

**Objectives:** Therefore the study aims to evaluate over 30 x 2 hour workshops offered at four tertiary institutions exploring interprofessional learning to promote empathy using a pre and post methodology.

**Methods:** Student participants from Monash University, Deakin University, University of South Australia, and Edith Cowan University completed a self-reporting survey package pre and post workshop (at five weeks) consisting of two established instruments i) Jefferson Scale of Empathy – Health Profession – Student version (JSE-HP-S) and ii) Readiness for Interprofessional Learning Scale (RIPLS).

**Results:** A total of n=296 students from 13 different medical and health care professions participated in the workshops (attended by minimum 3 different professions) in July-September 2012. The majority of participants were from Monash University n=251 (78%), the nursing profession n=67 (20%), < 26 years of age n=236 (73%) and enrolled in first year studies n=135 (42%). Using a paired t-test, self-reported empathy levels improved at p<0.0001, mean 114.34 vs. 120.32 (d=4.7). Each of the four RIPLS subscales also improved at p<0.0001 (d=1.2 – 3.9).

**Implications:** This project has shown that self-reported empathy levels and a readiness for interprofessional learning have been shown to statistically improve following a number of workshops. This project has provided important information in informing the development of medical and health care curricula that are directly responsive to the requirements of contemporary healthcare in Australia.

4S-1. Building Interprofessional Collaborative Teams (BICT): A program for enhancing team functioning through interprofessional collaboration training and team-developed solutions

Oral Presentation

- **Adam Reid**, Memorial University of Newfoundland, Centre for Collaborative Health Professional Education, St. John’s, NL, Canada
- **Olga Heath**, Memorial University of Newfoundland, Centre for Collaborative Health Professional Education, St. John’s, NL, Canada
- **Vernon Curran**, Memorial University of Newfoundland, Centre for Collaborative Health Professional Education, St. John’s, NL, Canada

Submitted abstract:
**Background:** Empathy is a vital characteristic for all medical and health care professionals. However, it is also a difficult characteristic to define, teach and assess. The ‘nebulous’ properties of empathic behaviour often means that educators fail to incorporate the explicit teaching and assessment of empathy within the curriculum. One solution suggested by a number of writers is that teaching empathy in an interprofessional education setting is an effective educational approach in developing empathic behaviours.

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**Implications:** This project has shown that self-reported empathy levels and a readiness for interprofessional learning have been shown to statistically improve following a number of workshops. This project has provided important information in informing the development of medical and health care curricula that are directly responsive to the requirements of contemporary healthcare in Australia.

**Author Biographies**
Adam Reid, MASP is the research coordinator at Memorial University’s Centre for Collaborative Health Professional Education, where he designs and implements evaluation and research components of interprofessional education programs. He holds a Masters of Applied Social Psychology from Memorial University and a Bachelor’s of Arts (Honors, Psychology) from Mount Allison University.

Dr. Olga Heath, PhD, R. Psych a Registered Psychologist, is the Director of the Centre for Collaborative Health Professional Education at Memorial University in Newfoundland Canada. Her research interests include health care team functioning, continuing interprofessional education and collaborative chronic disease management particularly in mental health. Dr. Heath worked as a clinical psychologist and a manager within the health care system for more than 20 years before moving to the university to work in interprofessional education.

Dr. Vernon Curran, PhD is Professor of Medical Education and Director of Academic Research and Development with the Faculty of Medicine, Memorial University. He is past Co-Director of the Centre for Collaborative Health Professional Education, Memorial University and co-led an Interprofessional Education for Collaborative Patient-Centred Practice (IECPCT) project at Memorial funded through Health Canada.
4S-2. Facilitating collaboration-ready health-care teams by promoting multifactorial causation models and avoidance of patient labeling

*Oral Presentation*

- **Murray Maitland**, University of Washington, Seattle, WA, USA

**Submitted abstract:**

**Background:** Communication strategies, including language, are the foundations of interdisciplinary teams. Language-based perception can drive a person’s contextual viewpoint. Organ-based language may cause “framing errors” which are incorrect perceptions of patient problems because of the wording used. For interdisciplinary teams, labels are problematic because different viewpoints might be expressed by incongruous labels or interpreted differently. While people recognize dangers of labels in societal contexts, health-care environments are rife with labels; the implications are not well understood.

**Objectives:** To advocate for explicit application of patient-specific multifactorial causation models of health and avoidance of diagnostic labels to improve interdisciplinary communication and collaboration.

**Discussion:** For decades, patient-specific, multifactorial causation models of health have been described including bio-psycho-social-cultural-environmental approaches. While the conceptual approach has benefits for health-care, there are limited applications in health-care literature, education and clinical care. In my own field, for example, inclusion criteria for research studies of knee osteoarthritis are typically based on x-rays even though it is well known that x-rays are not well-correlated to symptoms or a person’s activities. Since scope of practice typically falls within a single category of this model, links across traditional boundaries should be reinforced.

Several alternatives to labels have been proposed. A simple recommended method is to skillfully maintain a patient-specific problem list in language that is understood across all team-members including the patient. My solution was to reframe how health-care professionals view “diagnosis.” I modified the dictionary definition of diagnosis to encourage health-care team members to express their understanding of mechanisms that result in the patient’s presenting complaints.

**Implications:** Explicit application of a multifactorial causation model in language that is common across team members, including the patient, provides opportunities to develop discourse and share mutual goals. Value-added information, from across team members, can potentiate outcomes. Experience can enhance readiness for collaboration.

4S-3. OHSU Interprofessional Initiative: A model to prepare a collaborative healthcare workforce and develop an interprofessional culture

*Oral Presentation*

- **Jennifer Boyd**, Oregon Health & Science University, Portland, OR, USA
- **Judith Bowen**, Oregon Health & Science University, Portland, OR, USA
- **Jeanette Mladenovic**, Oregon Health & Science University, Portland, OR, USA
- **Jeffery Stewart**, Oregon Health & Science University, Portland, OR, USA

**Submitted abstract:**
**Background:** The OHSU Interprofessional Initiative (IPI)—a collaboration among the Schools of Dentistry, Medicine, Nursing, and College of Pharmacy and led by the Provost—prepares students for collaborative practice and research to improve patient-centered care and outcomes. OHSU is preparing the healthcare and scientific research workforce to meet the needs of patients in Oregon’s evolving healthcare system, including coordinated care organizations (CCOs), and in national healthcare reform. The goal of OHSU’s IPI is to prepare all students for deliberatively and intelligently working together with a common goal of building a safer and more effective patient-centered and community-oriented health care system, ultimately impacting the health and well-being of populations worldwide. We have made significant progress in implementing the OHSU IPI. Much work, however, remains to be accomplished, especially the areas of integrating faculty and developing a shared understanding of the importance of IPE to collaborative, patient-centered care.

**IPI Curriculum Framework:** The Interprofessional Education Collaborative (IPEC) competency domains of values/ethics, roles/responsibilities, communication and teams/teamwork as well as patient safety establish the framework for the OHSU interprofessional curriculum. The OHSU IPE has three major curricular components: “Foundations of Interprofessional Practice and Research” for first-year learners; Intermediate Interprofessional Practice – Collaborative Practice (IPE-CP), which includes simulation, electives and multiprofessional courses; and Advanced IPE-CP, which focuses of coordinated care teams. Creating an interprofessional culture has required educational redesign including implementing a common new student orientation, shared academic calendar, institution-wide core competencies, standardized grading system, and identification of courses (e.g., nutrition, anatomy) that could be taught across programs more effectively and efficiently, and integrated vertically and horizontally.

**Methods:** Program development and evaluation activities are driven by the IPI Steering Committee, IPI Advisory Committee, and several faculty task forces. Student learning assessments, directly linked to each session objectives, are conducted as part of each IPE Foundations session, scored by faculty facilitators, and integrated into course grades. Students and faculty facilitators evaluate each IPE session and results are used to modify program logistics and programming.

**Results:** Developing and evolving an IPI and IPE curriculum that is scalable, widely applicable and sustainable—and that meets the Triple Aim—requires significant culture change. To develop a culture supportive of IPE-CP, OHSU has and continues to address significant logistical and attitudinal transformation issues. Challenges and barriers that the IPI Steering Committee has faced and continues to struggle with range from overcoming professional “turf” issues within planning groups, aligning schools and programs, and identifying and helping to develop clinical sites where students can observe and meaningfully participate in interprofessional collaborative practice.

**Author Biographies**

Judith Bowen, MD, is Professor in the OHSU Schools of Medicine and Nursing, and the Provost’s Advisor on the Interprofessional Initiative. Dr. Bowen directs the OHSU Education Scholars Program, providing interprofessional development for clinicians, and prepares faculty to participate in the new integrated medical curriculum. As physician education consultant to the VA Office of Academic Affiliations’ Centers of Excellence in Primary Care Education, Dr. Bowen prepares health professionals to participate on interprofessional, patient-aligned care teams.

Jennifer Boyd, PhD, MBA, is Assistant Vice-Provost for Strategic Planning & Program Development at Oregon Health & Science University (OHSU). Dr. Boyd helps lead both OHSU’s dynamic strategic planning process and the OHSU Interprofessional Initiative. She has expertise in programmatic and institutional
Jeanette Mladenovic, MD, MBA, MACP, is Executive Vice President and Provost at Oregon Health & Science University (OHSU) and leads OHSU’s Interprofessional Initiative. A University of Washington AOA medical graduate, she completed residency training at Johns Hopkins and Stanford, and chief residency/hematology fellowship at UWA. She has held numerous faculty positions, served on the ABIM Board, and been an active member of the ABMS, Association of Professors of Medicine, American Society of Hematology, and ACGME.

Tanya Ostrogorsky, EdD, is Assistant Vice Provost for Assessment and Evaluation at Oregon Health & Science University where she is responsible for oversight of academic program evaluation and assessment for OHSUs 40+ academic degree programs as well as university-wide initiatives such as the OHSU Interprofessional Education Initiative. Dr. Ostrogorsky has worked as an evaluator for nearly 20 years and has a demonstrated record of expertise in designing and implementing evaluations using a variety of methods.

Jeffery Stewart, DDS, MS, is Associate Professor of Pathology & Radiology at the School of Dentistry and Assistant Professor of Pathology in the School of Medicine at Oregon Health & Science University (OHSU). He holds a leadership position for the OHSU Interprofessional Initiative (IPI) as co-chair of the IPI Steering Committee, which is composed of an interprofessional group of faculty and administrators. Dr. Stewart participates as a member of the IPI Professional Identity Formation Task Force.

**4S-4. Collaboratively building an organizational structure and strategy to support a culture of interprofessional care**

*Oral Presentation*

- **Siobhan Donaghy**, Sunnybrook Health Sciences Centre – St. John’s Rehab, Toronto, ON, Canada
- **Tracey Das Gupta**, Sunnybrook Health Sciences Centre, Toronto, ON, Canada
- **Sandra Ellis**, Sunnybrook Health Sciences Centre, Toronto, ON, Canada

*Submitted abstract:*

**Background:**

Sunnybrook is one of Canada’s largest, fully-affiliated academic health science centres, long recognized for its strong contribution to interprofessional education (IPE). Appreciating the interdependent impact that both IPE and interprofessional care (IPC) have on quality, patient-centred care, Sunnybrook embarked on a renewal process, ensuring organizational structures and processes were in place to foster a culture of IPC.

**Objectives:**

To create a roadmap for cultural renewal grounded in the principles of IPC, by engaging stakeholders across the organization in a strategy development process. To guide the identification of measureable goals, outcomes and long term impacts related to this renewal, using a project management framework.

**Methods:**

In 2013, Sunnybrook redesigned its organizational structure and created new leadership roles to align with the foundational principles of IPC. The organization then partnered with the Centre for IPE at the
University of Toronto to provide educational workshops for leaders. Representatives across all professional groups were engaged in evaluating organizational readiness for IPC using the IP-COMPASS tool as part of a strategy development process. A Logic Model was utilized as a project management tool to guide the overall process.

**Results:**
New committee structures and processes were created to foster collaboration across professional groups and teams. Three key areas of focus for the organization were identified, and working groups were tasked with identifying objectives and activities to undertake, as they related to overall goal of cultural renewal.

**Implications:**
The creation of new committee structures and processes has provided opportunities for enhanced efficiencies, engagement and collaborative decision-making across all areas of the hospital. Identified objectives are focused around patient-centred, interprofessional themes and engage participation across all relevant clinical and non-clinical groups at Sunnybrook. There are opportunities to evaluate and continue building on existing strengths in IPC as part of this cultural renewal process.

Authors:
Siobhan Donaghy, MSc(RS), BSc(OT), OT Reg(Ont.) Siobhan is the Professional / Collaborative Practice Leader for Occupational Therapy at Sunnybrook Health Sciences Centre – St. John’s Rehab in Toronto. She completed her Master’s degree in Rehabilitation Science from McMaster University, with a focus on interprofessional practice. She has been recognized for her excellence and leadership in practice and education, and is an instructor at the University of Toronto in the department of Occupational Science and Occupational Therapy.

Sandra Ellis, RRT, MAppSc Sandra is the Professional and Education Leader of Respiratory Therapy at Sunnybrook Health Science Centre in Toronto, and is a Clinical Adjunct Professor at the Michener Institute for Applied Health Sciences. Sandra holds a Master of Applied Science (Respiratory Science) from Charles Stuart University in New South Wales, Australia. She has been recognized for her passion and commitment to interprofessional education and collaboration.

Tracey DasGupta, RN, MN, CON (C) Tracey is the Director of Interprofessional Practice at Sunnybrook Health Sciences Centre in Toronto, providing leadership for interprofessional collaboration and professional practice. She completed her Master of Nursing degree at the University of Toronto and is an adjunct lecturer at the Lawrence S. Bloomberg, Faculty of Nursing. Tracey has been recognized with academic and practice awards related to patient care, teaching, and leadership excellence.

**5A. Crescendo: Strengthening the Voice of Recipients in Improving their Health**

**Workshop**

**Program abstract:** Globally, healthcare delivery and improvement processes advocate placing recipients (individuals/families/communities) at the center of collaborative healthcare teams. This workshop will guide participants through a process of designing experiences for a variety of contexts and offer deliberative practice in creating strategies that strengthen recipients’ voices for improving their health.

- **Holly Wise**, Medical University of South Carolina, College of Health Professions, Charleston, SC, USA
- **Mary Mauldin**, Medical University of South Carolina, Charleston, SC, USA
Maralynne Mitcham, Medical University of South Carolina, Charleston, SC, USA
Deborah Williamson, Medical University of South Carolina, Charleston, SC, USA
David Garr, South Carolina AHEC System, Charleston, SC, USA
Patrick Cawley, MUSC Medical Center, Charleston, SC, USA

Submitted abstract:
No matter the country, healthcare delivery and improvement processes advocate placing recipients (individuals, families, and communities) at the center of collaborative healthcare teams. For institutions leading interprofessional education (IPE) and collaborative practice (CP) initiatives and those individuals modeling these approaches in a variety of delivery settings and contexts, it is imperative to align future efforts with ongoing calls to action. Yet, delivering high-quality healthcare requires more than educating recipients about their health, their diagnoses, and potential treatment options. Rather, the overall intention is to collaborate with and engage recipients in ways that allow them to feel included in plans for improving their health. Though 2500 years old, the oft quoted line from Hippocrates, “It is more important to know the patient who has the disease than the disease the patient has,” is an important reminder for future planning and implementation of IPE and CP.

Designing, implementing, improving, and evaluating efforts that link IPE and CP and ensuring that recipients are active members of the healthcare team can be daunting. Factors such as lack of trust, infrastructure, adequate communication, and precedent may take significant time to address and resolve. Developing a strong collaborative spirit requires respect for different perspectives, willingness to do things differently, and a commitment to creating opportunities that strengthen recipients’ voices.

This workshop will guide participants through a process of designing IPE/CP experiences for a variety of contexts and offer deliberative practice in creating strategies that strengthen recipients’ voices for improving their health.

1. Learning Objectives: Harness recipients’ voices in IPE/CP experiences designed to improve their health.
2. Use the principles of Appreciative Inquiry and Resource Mapping as a guide for designing and/or improving IPE and CP experiences.
3. Develop a collaborative action plan for implementing and evaluating a proposed IPE/CP experience that strengthens the recipients’ voice in improving health for individuals, families, and communities.

Methods: Learning activities and participant engagement

- Introduction of topic and key points
- Using a variety of healthcare contexts, case-based, small group break-out sessions will provide opportunities to use Appreciative Inquiry and Resource Mapping strategies to inform discussion and pose solutions for strengthening the voice of recipients
- Reports from small groups to highlight strategies for strengthening the voice of recipients
- Synthesis of small group ideas, emergence of common themes
- Development of individual action plans relevant to the constituents served
- Summary and closure
Results:
- Increased commitment to the importance of engaging recipients in the design, implementation, and evaluation of IPE/CP experience.
- Collaborative action plans relevant for a variety of constituents and contexts.

Implications: Bringing the recipients’ voice to the foreground will assure that the right people are involved in the right discussions at the right place and at the right time. Further, the importance of considering all perspectives before making key health service and delivery decisions can only benefit recipients all around the world.

References
2. Institute of Medicine (2012). Best Care at a Lower Cost: The Path to Continuously Learning Health Care in America.
4. Appreciative Inquiry Commons, www.appreciativeinquiry.case.edu

Author Biographies
Holly Wise, PT, PhD is an academic educator and physical therapist with a breadth of experience in interprofessional education and collaborative practice. She has worked in settings ranging from home health and out patient offices to acute care hospitals and rehabilitation centers. Prior to joining the College of Health Professions at MUSC, Dr. Wise co-owned a private practice for 13 years, and co-founded two interprofessional post-polio evaluation clinics.

Mary Mauldin, EdD is the Interim Co-Director of the Office of Interprofessional Initiatives and the Executive Director of the Office of Instructional Technology and Faculty Resources at the Medical University of South Carolina. Dr. Mauldin’s major area of focus is on faculty development for interprofessional initiatives.

Maralyyn Mitcham, PhD, OTR/L, FAOTA is Professor and Assistant Dean, College of Health Professions, and interim co-director for the Office of Interprofessional Initiatives at the Medical University of South Carolina. An experienced academician, Dr. Mitcham is known nationally and internationally for teaching, instructional design; curriculum development, evaluation, and faculty development. She promotes the scholarship of teaching and learning, and leads interprofessional education initiatives with her commitment to strengthening caring, compassion, and the voice of recipients in service delivery.

Deborah Williamson, DHA, MSN, CNM is the Associate Dean in the MUSC College of Nursing and Director of the Hispanic Health Initiative. She has received significant funding for community-based interventions focused on social justice and health equity. Her programs are notable for their sustainable community partnerships. For 30 years, her midwifery practice was based on a collaborative model and she has taught in multiple inter-professional courses.

David Garr, MD is a family physician, an associate dean at the Medical University of South Carolina, and the Executive Director of the South Carolina AHEC System. He has served as a co-chair of the
interprofessional Healthy People Curriculum Task Force since 2003. The major areas of focus during his career have been to improve health outcomes through the integration of prevention, population health and interprofessional care into health professions education and clinical practice.

Patrick Cawley, MD is the chief medical officer and an associate professor of medicine at MUSC Medical Center in Charleston, SC. In this role he is responsible for the quality and safety of all patient care programs as well as direct oversight of clinical service lines. Dr. Cawley co-founded the first hospital medicine program at Duke University and is a Past-President of the Society of Hospital Medicine.

5B. From Tabletop to Laptop: Making Interprofessional Collaboration Real

Workshop

Program abstract: Successful interprofessional education requires that multiple health professions engage in experiences where they learn about, from, and with each other. In this interactive workshop, the audience will participate in one experience grounded in this learning principle and then see how this principle works in a successful large-scale web-based educational platform.

- Peter Boling, Virginia Commonwealth University, Richmond, VA, USA
- Alan W. Dow, Virginia Commonwealth University, Richmond, VA, USA
- Lana Sargent, Virginia Commonwealth University, Richmond, VA, USA
- Jeffrey Delafuente, Virginia Commonwealth University, Richmond, VA, USA
- Annemarie Conlon, Virginia Commonwealth University, Richmond, VA, USA

Submitted abstract: 

Background: Interprofessional education must engage all health professions while also overcoming logistic challenges such as scheduling, space, and faculty time. Interactive, web-based learning solutions are a potential solution.

Objectives: To experience and describe learning principles underlying successful interprofessional education and to apply these principles to educational experiences in other formats.

Methods: We designed and implemented a web-based asynchronous team learning and evaluation system. The system sequentially and selectively delivers case information to members of learner teams comprised of multiple disciplines, forces them to share information and collaborate to answer multiple choice questions, and automatically gathers extensive data on performance. Learners also perform repeated quantitative 360 evaluations of one another. The data drives reports that address attainment of individual core competencies in topical areas plus demonstration of teamwork and team competency, while simultaneously supporting assessment of curricular integrity.

For 40 minutes we will simulate what happens in the web-based case system by conducting an interactive live workshop that will demonstrate interactive team-based shared problem-solving and learning. Using a format previously tested, the audience will be formed into small teams and participate using interactive internet technology (PollEverywhere); a basic mobile communication device such as a cell phone is all that participants will need.

Then, for 30 minutes, we will describe the learning principles at work during this demonstration and present how these principles were integrated into the construction of a web-based learning platform. We will also present outcomes from the implementation of a geriatrics case using this learning platform.
We will leave at least 20 minutes for general discussion. The panelists represent faculty from the four student disciplines currently engaged in this case.

**Results:** A session similar to this was presented recently at a national geriatric conference to an audience of 230 educators with overwhelmingly positive reviews. In addition, the web-based platform has been used by over 800 VCU professional students, representing medicine, nursing, pharmacy, and social work. By June 2014, more than 1,200 total learners will have participated in this complex geriatric capstone case experience. The main findings from this experience include that the system: 1) concurrently engages large numbers of learners in successful team problem-solving; 2) gathers and organizes automatically detailed information about learner competency and observed behavior on teams; 3) generates data that document and reflect the adequacy of curricula in defined topic areas; 4) demonstrates that team scores outperform individual scores; and 5) reveals that team behaviors predict team performance. The system is now being adapted for use by several other universities in a beta application prior to a more extensive dissemination.

**Implications:** Interprofessional education should be based on sound learning principles. Based on these principles, impactful educational experiences can be created in the virtual environment to overcome barriers to interprofessional education.

**Author Biographies**
Peter Boling, MD is professor and chair, Division of Geriatric Medicine at Virginia Commonwealth University where he has led and published on curricular reform and innovation for over 2 decades. His 32-year academic career centers on geriatrics and interprofessional models with a constant theme of team-based care for frail and at-risk older adults. He is PI for the grant which funded development of the case system and is co-leading its dissemination.

Alan Dow, MD, MSHA is an associate professor of Medicine and assistant vice president of health sciences for interprofessional education and collaborative care. He leads the design, implementation, and assessment of major interprofessional programs across five health science schools with over 3,200 clinical health science students and a major academic health system. He has published research in Academic Medicine, The Journal of Interprofessional Care, and The Journal of Continuing Education in the Health Professions.

Jeffrey C. Delafuente, MS, FCCP, FASCP is Professor and Associate Dean for Academic Affairs, VCU School of Pharmacy. He has published in The American Journal of Pharmacy Education, The Journal of the American Pharmacist Association, and The Annals of Pharmacotherapy.

Lana Sargent, MSN, RN, FNP-C, GNP-BC is a clinical instructor of nursing at VCU School of Nursing. She has published in The Journal of Nursing Administration, Nursing Forum, and Nature.

5C. Government-led Innovation for Health: "Pencerah Nusantara" the case of Indonesia

Panel Presentation

Program abstract: Pencerah Nusantara is an interprofessional collaboration practice initiated by Office of President’s Special Envoy on MDGs, implemented in seven community-based health centers in six different Regions/Municipalities. The platform supports innovative actions, implemented to reach optimum impact for revitalization of nation-wide primary healthcare. This session will highlight business process reengineering around policy advocacy, technology and multi sector collaboration as means of implementing partnerships.

- Diah S. Saminarsih, Office of President Special Envoy on MDGs, Jakarta, Indonesia
- Anindita Sitepu, Office of President Special Envoy on MDGs, Jakarta, Indonesia
- Yurdhina Meilissa, Office of President Special Envoy on MDGs, Jakarta, Indonesia
- Olivia Herlinda, Office of President Special Envoy on MDGs, Jakarta, Indonesia

Submitted abstract:

Background: Access to health services and health equity are not yet met, health burden continues to increase, and communities have increasingly grown weary of their existing conditions. Health care system should respond better and faster toward demands of global and relevant in-country development frameworks of actions. Primary health care is at the forefront of community health care services. A well-developed and sustainable primary health care will promote health equity and improve access to health facilities among communities and resulted in resilient communities.

This problem inhibits Indonesia from meeting health-related Millennium Development Goals (MDGs) and executing impactful and sustainable health initiatives. With two years remaining to put more effort into achieving the Goals, an integrated action-oriented model of inter-professional collaboration must be designed for immediate implementation. Furthermore, Indonesia has 9,133 community-based health centers/Puskesmas spread across the nation as the architecture required for a health-oriented innovation and multisectoral collaborative effort.

Objective: Some changes happening in the workings of governments across the globe, have resulted in major innovations it’s structures and systems with an aim to deliver greater efficiency, and more responsive and flexible public services. Specifically for health-related impact, unequal distribution of competent health workers and the failure to reach the marginalized living in periphery locations, are few areas where the Government mechanism falls short. Problems arise from policy, outreach, and action-oriented interventions that originated from the government as well as from the grass roots. This model is meant to allow health practitioners to interact, improve and provide the optimal delivery of patient care.

Methods: Pencerah Nusantara is an inter-professional collaboration practice initiated by Office of President’s Special Envoy on Millennium Development Goals (OSE MDGs), implemented in seven community-based health centers in six different Regions/Municipalities. The platform supports innovative actions, implemented to reach optimum impact for revitalization of nation-wide primary healthcare. Key points of business process reengineering accommodated in Pencerah Nusantara platform are as follows:

1. Policy Advocacy: Recruitment, Selection and Competency Training
   In the effort to harness active participation of early-career health professionals, OSE MDGs utilizes social media as the main avenue of public communication.
2. Technology: Use of IT, Universal Health Coverage and Health Economics issues
Utilization of IT/mobile phones to disseminate information and establish ongoing communication between health centers and Regional Hospitals.

3. Multi Sector Collaboration as means of implementing partnerships
   Engagement in sustainable funding and governance of programs between public, private, and civil societies.

Result: In its second year of implementation, preliminary findings of Pencerah indicate the following positive outcomes:

1. On-the-ground engagements have moved to areas beyond health, such as education and community empowerment.
2. Knowledge Management and Program engagement includes team development, professional development, and improvement in business process, delivery of care and clinical practice tools and guidelines.
3. Communities are getting stronger and more resilient communities after a year of engagement

Conclusion: Pencerah Nusantara is a breakthrough action in health that is highly relevant to be implemented not only in-country, but also on regional and global levels. Areas for improvement include Research and Development, Strategic, Public and Media Communications and Innovative Health Financing.

Author Biographies

Diah Saminarsih: Academically trained as a Psychologist, Diah pursued her professional path as a Management Consultant, with specialization in Human Resources, Strategic Communication And Corporate Restructuring. As Assistant President’s Special Envoy on MDGs for Program Planning and Partnerships, Diah is directly involved in the design and implementation of Pencerah Nusantara and Indonesia MDG Awards. She is also an active member of the Task team of Partnership for Maternal Neonatal and Children Health (PMNCH) for Post 2015 Global Framework on Women and Children Health.

Anindita Sitepu: Anindita is graduated from psychology faculty of The university of Indonesia and immediately pursued her Master degree in clinical psychology in Leiden University. Regarding to her degree, she has a big interest in the relation of psychological and physical condition and its intervention. She joined office of President’s Special Envoy on MDGs as a program manager at the end of 2011. She is also one of the representatives of International Student Network.

Yurdhina Meilissa: Getting her medical degree and graduated Cum Laude from Yarsi University in 2012, She worked as a doctor of Pencerah Nusantara program in Ogotua Primary Health Care, Central Sulawesi. Starting from then, she began developing her interest in health system and policy. Now, she is working under the office of President’s Special Envoy on MDGs as a program officer in Research and Development Division.

Olivia Herlinda: Olivia is graduated with a bachelor degree in Clinical and Community Pharmacy from Institut Teknologi Bandung. After graduation, she joined Pencerah Nusantara and worked as a health advocate for a year in Tosari, East Java. From the experience she got, Olivia realized that inter-professional collaboration takes a very important role in health care services. After then, she joined the office of president’s special envoy on MDGs as a program officer specialized in Research and Development.
5D. The rigorous use of theory to promote the effective development, implementation, and evaluation of Interprofessional Education

Workshop

Program abstract: Theory in interprofessional education is essential but the rigour in which theory is applied can be limited. This workshop uses the concepts of coproduction, narrative and theoretical quality to demonstrate how theory can be best applied and be practically useful in addressing the challenges of interprofessional education.

- Sarah Hean, Bournemouth University, Bournemouth, England, UK
- Shelley Doucet, University of New Brunswick, Saint John, NB, Canada
- Lesley Bainbridge, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- Chris Green, University of Essex, Southend-in-Sea, Essex, UK
- Phillip Clark, University of Rhode Island, Kingston, RI, USA
- Elizabeth Anderson, University of Leicester, Leicester, UK

Submitted abstract:

Background: Theory in interprofessional education (IPE) is essential and an increasingly wide range of theories has been applied to underpin or explain different aspects of this activity. However, theory is often missing from everyday reflective educational practice: from curriculum development and the design of evaluations and research. If present, the quality with which it is applied can be limited.

Objectives: This workshop uses the concepts of coproduction, narrative and theoretical quality to demonstrate how theory can be both practically useful and enhance the rigour of interprofessional education.

At the completion of this workshop participants will be able to:

- Identify real life educational issues, which may be informed by the application of new theoretical knowledge.
- Describe theoretical underpinnings of their interprofessional curriculum, research or evaluation.
- Apply skills related to second order reflection, proposition development, theoretical quality and theory validation that will inform the development of theoretically rigorous interprofessional curricula.

Methods and interactive elements: The workshop comprises a mixture of short presentations, small group work and interactive poster presentations offered in 5 phases.

1. An emerging method of theory into practice: Presenters share an emerging methodology of translating theory into practice, piloted at CABIV (June 2013) and a Canadian Institute of Health Research funded symposium (April 2014). The method is grounded in narrative as a means of coproduction of user and theorist knowledge, Bernstein’s classification system to explore new domains and terrains of knowledge between theorists and practitioners, and key principles used to establish theoretical quality (10mins).

2. The application of theory: Presenters share an introduction to theory and its application to IPE (5mins).

3. Sharing participant knowledge through narrative: Participants share their own challenges in IPE by building their own narrative (participant knowledge). The workshop employs small group work, narrative and problem based learning techniques to discuss and identify the challenges they would like to understand better or resolve using theory as a cognitive tool (20 mins).
4. Sharing theorist knowledge: Presenters share their knowledge of some key theories commonly used in IPE. The workshop combines a theoretical carousel in which theorists briefly share their theoretical knowledge supported by posters illustrating how theory has been used in a range of case studies (10 mins).
5. Coproduction and moving towards second order critical reflection and problem solving: Small group work will engage theorist and practitioner knowledge to coproduce theory-informed approaches to practice problems. Each group has the opportunity to share these outputs with the workshop participants. (30mins)
6. Conclusions: Presenters summarize the discussion, conclude with opportunities to become engaged with the IN-2-Theory Network and present ways forward in the development of theory in IPE (10 mins).

Author Biographies
Sarah Hean Her main interests are in the development and application of theory to enhance rigour in IPE research and practice. She has been involved in the evolution of interprofessional theory through initiatives such as “Evolving theory in IPE: a Research Council seminar series” and is chair of the In-2-theory: network. She is a board member for the Centre of the Advancement of Interprofessional Education (UK) and is an Associate Editor for the Journal of Interprofessional Care.

Shelley Doucet Shelley is Assistant Professor in Nursing at the University of New Brunswick, Adjunct Professor with Dalhousie Medicine New Brunswick, Affiliate Professor at University of British Columbia, and the nominated Research Chair in Interprofessional Patient-Centred Care at UNB. Her experiences teaching interprofessional student teams in classroom and clinical settings, as well as her ongoing clinical experiences in mental health nursing, have led her to establish interprofessional health education and practice initiatives and to explore their outcomes.

Lesley Bainbridge Lesley Bainbridge is the Director, Interprofessional Education in the Faculty of Medicine and Associate Principal in the College of Health Disciplines at the University of British Columbia. She has published in peer reviewed journals on IPE and informed shared decision making and has presented on IPE related topics at several national and international conferences. She holds a masters degree in education and an interdisciplinary doctoral degree with a focus on interprofessional health education.

Chris Green Chris’ previous research has focused upon the way learners negotiate interprofessional education. His vocational and research interests lie in the design and delivery of interprofessional curricula grounded in clearly articulated theoretical foundations, and the ways in which interprofessional learning can be supported in practice settings. He is the Interprofessional Learning Lead in the School of Health and Human Sciences at the University of Essex and is Associate Editor of the Journal of Interprofessional Care.

Phil Clark Phillip Clark, ScD is Professor and Director of the Program in Gerontology at the University of Rhode Island. He received his Doctorate in Public Health from Harvard University, and has been Visiting Professor at the Universities of Guelph and Toronto in Canada, Fulbright Scholar at Buskerud University College in Norway, and Visiting Professor at Huddersfield and Bournemouth Universities in England. His experience includes teaching teamwork and developing and evaluating interdisciplinary research and demonstration projects.
Liz Anderson is a Professor of Interprofessional Education and has led innovations in medical education from Leicester Medical School from where she leads on patient safety and the development of an IPE curriculum shared by three universities, in S. Midlands UK. She is a National Teaching Fellow. From an early career as a nurse, midwife and health visitor she moved into education and has served on several national boards for the enhancement of professional education. She has published widely and continues to support research into the practice and delivery of IPE.

5E-1. Evolution of a Faculty Development Program for IPE Facilitation: A process view

Oral Presentation

- Cynthia Beel-Bates, Grand Valley State University, Kirkhof College of Nursing, Grand Rapids, MI, USA
- Jeanne Smith, Grand Rapids Medical Education Partners, Grand Rapids, MI, USA
- Tracy Christopherson, Elsevier Clinical Solutions, Grand Rapids, MI, USA

Submitted abstract:

**Background/Significance:** Faculty often lack adequate preparation for effective interprofessional education (IPE) facilitation (Hammick, Freeth, Koppel, Reeves & Barr, 2007). This presentation will illustrate the longitudinal evolution of a faculty development program to prepare faculty to become effective facilitators of IPE.

**Methodology:** The program applied Kolb’s learning theory and evolved using three frameworks: Banfield and Lackie’s (2009) IPE Performance-based Competencies for Facilitation model; Sargeant, Hill, and Breau’s (2010) Interprofessional Facilitation Scale; and the scope of practice, partnership and dialogue concepts from Elsevier’s Clinical Practice Model (CPM) Framework. A program evaluation plan was designed to assess and re-design the program based on data analysis and feedback from the stakeholders.

**Results:** Three faculty cohorts (N=18) representing six professions have participated in a blended/hybrid program. The pilot program rolled out prior to integrating the CPM framework concepts which were added in session two. Based on feedback, the program has transitioned from 15 face-to-face (f2f) and nine online hours, to nine f2f and 15 online hours. The number of required readings has been reduced and some content eliminated due to the time needed for meaningful learning. Following participation in the program, faculty (N=16) facilitated an interprofessional course. Student perceptions from 138 students ranked faculty effectiveness as either good or excellent on five critical behaviors of facilitation. Other measurable outcomes of the program are: IPE course moving from elective to required in multiple disciplines; 15 new faculty referred participants; IPE faculty teams developed six new interprofessional cases and submitted and/or presented 13 IPE scholarly projects.

**Implications:** Continuous program evaluation and modification is required for IPE faculty development due to the complexity and change in culture.

**Objectives:**

1. Summarize the program design and evaluation plan.
2. Illustrate continuous improvement process and changes to content and delivery methods.
3. Share evaluation data indicating positive changes in faculty behaviors.
Author Biographies
Tracy Christopherson, MS, BAS, RRT is the Director of Interprofessional Education and Practice for Elsevier Clinical Solutions. She has been a leader in creating interprofessional practice environments for over 20 years. Her experience comes from coaching and mentoring numerous organizations across the United States and Canada in advancing interprofessional integration and implementing an integrated clinical practice framework to strengthen practice at the point-of-care. She is passionate about bridging the gap between interprofessional education and practice.

Cynthia Beel-Bates, PhD, RN is an associate professor of nursing at Grand Valley State University. Her nursing career has included acute care, community health, program development, nursing home administration, dementia care, hospice, research, and education. For the past 4 years, she has championed interprofessional education at GVSU; creating, implementing, and evaluating faculty development for the facilitation of IPE and facilitating IPE curricular development in undergraduate and graduate health professions programs.

Jeanne Smith, M.Ed, BS, BA, Educator and Content Developer at Grand Rapids Medical Educational Partners (GRMEP), is primarily responsible for needs analysis, design, development, authoring and evaluation of high-quality and cross-functional learning programs, curricula and instructional materials for residency/fellowship and faculty development programs. Her research, education and faculty support roles have focused on integrating instructional technologies, simulation and interprofessional education (IPE) into the health professions curricula.

5E-2. Utilizing Instructional Technologies to Overcome Barriers for IPE Faculty Development

Oral Presentation

- Jeanne Smith, Grand Rapids Medical Education Partners, Grand Rapids, MI, USA
- Cynthia Beel-Bates, Grand Valley State University, Kirkhof College of Nursing, Grand Rapids, MI, USA
- Tracy Christopherson, Elsevier Clinical Solutions, Grand Rapids, MI, USA

Submitted abstract:
Background/Significance: Interprofessional Education (IPE) is interactive and occurs when two or more professions learn with, from, and about each other to improve collaboration and the quality of care. (CAIPE, 2002). Most health professions’ faculty are only familiar with their own individual professional culture (Buring et. al., 2009), often lacking adequate preparation for effective IPE facilitation (Hammick, Freeth, Koppel, Reeves & Barr, 2007). A major barrier to delivering an interactive IPE faculty development program face to face (f2f) is the complexity of coordinating faculty schedules. A virtual learning space utilizing innovative instructional technologies can provide asynchronous learning opportunities for faculty.

Methodology: A faculty development program grounded in adult learning theories was implemented using blended/hybrid, spaced, social media and clinical team-based practice learning methodologies. Through high fidelity simulation, Blackboard, online lectures, journals, wikis, and internet based video, faculty were able to collaborate and learn interactively. Banfield and Lackie’s (2009) IPE Performance-based Competencies for Facilitation model provided the framework while Sargeant, Hill, and Breau’s (2010) Interprofessional Facilitation Scale was utilized to assess educator’s pre and post perceptions of their own facilitation skills. Blackboard provided easy analysis to match pre and post perception survey
results. Using video technologies, faculty observed and rated their actual facilitation performance while viewing a recorded simulation of themselves.

**Results:** Eleven faculty from three professions completed the pre-survey; nine completed the post survey (82%). There were 18 questions; perceptions changed on all 18 items ranging from 11% to 66% indicating faculty perceived themselves to be more competent to facilitate IPE.

**Implications:** The use of instructional technologies and online learning opportunities can provide an effective medium for IPE faculty development.

**Objectives:**
1. Identify instructional technologies beneficial to delivering and enhancing IPE education.
2. Explore adult and experiential learning theories.
3. Discuss how to transform f2f curricular activities to meaningful online experiences.

**Author Biographies**
Tracy Christopherson, MS, BAS, RRT is the Director of Interprofessional Education and Practice for Elsevier Clinical Solutions. She has been a leader in creating interprofessional practice environments for over 20 years. Her experience comes from coaching and mentoring numerous organizations across the United States and Canada in advancing interprofessional integration and implementing an integrated clinical practice framework to strengthen practice at the point-of-care. She is passionate about bridging the gap between interprofessional education and practice.

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**5E-3. Creating Faculty Engagement in Interprofessional Learning Experiences**

**Oral Presentation**
- **Genevieve Pinto Zipp,** Seton Hall University, South Orange, NJ, USA
- **Robert Wellmon,** Widener University, Chester, PA, USA
- **Linda Knauss,** Widener University, Chester, PA, USA
- **Mary Baumberger-Henry,** Widener University, Chester, PA, USA
- **Catherine Maher,** Seton Hall University, South Orange, NJ, USA
Submitted abstract:
Developing and implementing interprofessional education (IPE) experiences into existing silo-based health science professional curriculums can be challenging for academic institutions and their academic and clinical faculty. Thus, creating an appreciation of and awareness of the importance of IPE experiences, for both academic and clinical faculty, as they relate to the development of patient-centered interprofessional practice (IPP) in today’s health care arena is paramount. While the Academy is ideally positioned to help health care professionals meet the challenges of IPP, faculty preparation is critical to effectively and efficiently create meaningful and engaging IPE experiences that transcend the boundaries of the traditional silo-based curricula of professional schools.

This panel discussion will present the approaches used at two different institutions to engage and support academic and clinical faculty in the development of meaningful interprofessional education (IPE) experiences. Seton Hall University (SHU), cross discipline IPE Taskforce has developed and implemented a strategic plan that provides all SHU- SHMS academic and clinical faculty with foundational experiences that explore the tenets of IPE, the University’s mission and the School strategic plan as it relates to IPE. Widener University, which offered its first interprofessional learning experience in 1997, uses an approach that incorporates faculty training and development into its IPE learning experiences. Interprofessional collaboration among the health and human service disciplines within the University is a core value. The approach to faculty mentorship is believed to be an important part of the effectiveness of two interprofessional learning experiences.

Both institutions recognize the importance of supporting faculty awareness and appreciation of the Interprofessional Education Collaborative (IPEC) core competencies and its impact on the future of patient-center interprofessional practice and have ensured that faculty are mentored along this IPE journey. The panel discussion will offer potential solutions for academic institutions who seek to engage and develop faculty to participate in the development of rich IPE experiences as part of their graduate and undergraduate health care and human service educational experiences. Evidence for the effectiveness of the approaches by both Universities will be shared as part of the panel discussion. Session participants will be invited to share their perspectives on the challenges that arise in providing faculty with the foundational awareness and support needed to engage in the development of IPE experiences and programs. The presenters from the panel will facilitate large and small group discussions among the participants that shares lessons learned.

Objectives: The objectives of the presentations are to: (1) provide a forum to discuss strategies for creating foundational experiences for faculty specific to the development of interprofessional educational experiences and patient-center interprofessional practice; (2) demonstrate how faculty awareness, appreciation and feedback contributes to the development of meaningful interprofessional learning experiences; (3) discuss how to enhance faculty buy-in for IPE by creating engaging and authentic learning experiences; and (4) discuss how to engage clinical faculty in the development of IPE experiences as a means to foster patient-center interprofessional practice model in today’s health care arena.

Course Description: This panel discussion will explore two universities approaches used to engage academic and clinical faculty in the development of meaningful interprofessional education (IPE) experiences. The approaches explored recognize the importance of supporting faculty awareness and appreciation of the Interprofessional Education Collaborative (IPEC) core competencies and its impact on the future of patient-center interprofessional practice. The panel discussion will offer potential solutions for academic institutions who seek to engage faculty to educate graduate and undergraduate
health care and human service students using an IPE model. Evidence for the effectiveness of both approaches will be shared as part of the panel discussion. Participants will be invited to share their perspectives on the challenges that arise in providing faculty with the foundational awareness and support needed to engage in the development of IPE experiences and programs. The presenters from the panel will facilitate a large and small group discussions among the participants that shares lessons learned.

**Author Biographies**
Genevieve Pinto Zipp, PT, EdD is a Professor at Seton Hall University in the School of Health and Medical Sciences, Department of Graduate Programs in Health Sciences. Her professional interests involve the effects of constraint induced movement techniques, the effects of dual task performance on walking, and the use of diverse teaching and learning strategies for the promotion of critical thinking skills. She is the chair of the Interprofessional Education Taskforce at Seton Hall University.

Catherine Maher, PT, DPT, GCS is an Assistant Professor at Seton Hall University in the School of Health and Medical Sciences, Department of Physical Therapy. Her professional interests involve the effects of dual task performance on walking, and the use of diverse teaching and learning strategies for the promotion of critical thinking skills.

Robert Wellmon, PT, DPT, PhD, NCS is an Associate Professor at Widener University in the Institute for Physical Therapy Education. His professional interests involve the examination of factors affecting functional task performance in older adults and patients recovering from stroke and traumatic brain injury, outcome measures used in clinical practice, and interprofessional teaching and learning. He has had a key role in the development of two very successful interprofessional learning initiatives Widener University.

Linda K. Knauss, PhD, ABPP is a Professor at Widener University in the Center for Graduate Clinical Psychology and the Director of Internship Training. Her research and clinical interests include training and supervising psychologists, ethics and professional issues and child, adolescent and family therapy and interprofessional education. Dr. Knauss has been a tireless advocate within the University for the importance of including opportunities for interprofessional learning and and collaboration in the curricula of the professional schools. She has led multiple international interprofessional trips.

Mary Baumberger-Henry, PhD, RN is an Associate Professor at Widener University in the School of Nursing. Her area of clinical expertise and research includes nursing theory, burn, emergency, critical care and disaster nursing and cooperative learning. She has been influential in helping her colleagues understand the importance of including opportunities for interprofessional learning in the nursing curriculum at Widener University.

**5E-4. Interprofessional Ethics: A Toolkit for Faculty**

*Oral Presentation*

- **Anne Stewart**, James Madison University, Harrisonburg, VA, USA
- **Emily Akerson**, James Madison University, Harrisonburg, VA, USA
- **Brenda Jean Bryson**, James Madison University, Harrisonburg, VA, USA
- **Janet Gloeckner**, James Madison University, Harrisonburg, VA, USA
Submitted abstract:

**Background:** Ethics is a shared, relevant concern among health and human service disciplines and is an ideal vehicle for students and practicing professionals from different fields to learn about one another’s disciplines and to participate in interprofessional team analysis, discussion, and problem-solving. We will share a variety of experiential learning activities developed by an interprofessional faculty team. The activities are part of the Ethical Decision-making in Healthcare: An Interprofessional Approach course at James Madison University. The class has been team taught since 2003 with over 1,500 students from a number of professional and pre-professional programs.

Research in interprofessional practice demonstrates that our team work skills, including a willingness to share our unique body of knowledge with other health care providers, is vital in achieving positive patient outcomes and in enhancing job satisfaction. The workshop activities will provide an integrated interprofessional learning experience for participants to reflect on their personal and professional values, share discipline-specific knowledge related to interprofessional ethical concerns, and exchange effective, innovative instructional practices with other participants.

**Objectives:** As a result of participating in this workshop, participants will be able to: Describe the benefits of using ethics in IPC coursework or trainings. Identify, at least, 5 creative experiential strategies and techniques for promoting IPC teamwork in a climate of mutual respect and shared values. Demonstrate innovative teamwork and case-based activities to facilitate IPC ethical decision-making (IPC ethic grid, tangram, learning style assessment, IPC case, etc). Develop a personal plan for implementing strategies in their course or trainings.

**Teaching Methods:** The teaching methods will include experiential and interactive activities, discussions, and case-based problem-solving. Following the practice of the activities, participants will discuss their experience and consider how to implement the strategies in their settings.

**Results:** The teaching methods and instructional strategies will include experiential and interactive activities, discussions, and case-based problem-solving. Following engaged practice of the activities, participants will discuss their experience and consider how to implement the strategies in their settings. Participants will be actively involved in practicing the strategies and techniques.

**Implications:** The workshop participants will have tools and strategies to incorporate into a new course or an existing course that prepares students for interprofessional collaborative practice.

**Author Biographies**
Anne Stewart - Promoting creative and playful therapeutic interventions and collaborations across the country and throughout the world is a regular activity for Anne Stewart. Anne is a Professor of Graduate Psychology at James Madison University in Virginia where she teaches and supervises graduate students in interprofessional ethics, play therapy, family therapy, and clinical practicum. She serves as the faculty coordinator for the Interprofessional-International concentration and has led student courses in the Dominican Republic and Costa Rica.

Emily Akerson graduated with a BSN from Cornell University, an MN in Community Health Care Systems, and Family Nurse Practitioner program from the University of Washington and is currently enrolled in the Doctorate in Nursing Practice program at University of Virginia. She is an Associate Director of the Institute for Innovation in Health and Human Services (IIHHS) at James Madison University (JMU). Her
responsibilities include coordinating interprofessional education and collaborative practice through the IIHHS.

Dr. BJ Bryson, PhD, MSW, Professor of Social Work, has over twenty years of direct social work practice including experience within emergency, trauma, NICU, PICU and community-based clinic health care. She has also been involved in higher education for over twenty years.

Janet Gloeckner PhD, RD, a registered dietitian with an advanced degree in geriatric nutrition, is a Professor at JMU, Department of Health Sciences/ Dietetics Program. Prior to becoming an educator, Janet worked in acute care as a clinical dietitian with emphases on diabetes and renal disease and long-term care. Her research interests are determining nutritional risk factors for chronic disease and nutritional therapy that is most successful in helping clients make lifestyle changes.

Lisa McGuire has been a social work educator for the past twenty-five years. She received her BA (Psychology) from Butler University, her MSW from Indiana University, and her Ph.D. from Case Western Reserve University. She was worked in the areas of teenage pregnancy, public housing and child welfare, working collaboratively to achieve positive outcomes for clients and the community. She is currently serving as the Department Head of Social Work at James Madison University.

Dr. Erica Lewis is a registered nurse. Her areas of research and teaching expertise include bioethics and healthcare quality. Dr. Lewis has published on the topic of effect to nurses from involvement in medical error along with other ethics topics; such as pain control in vulnerable populations. Dr. Lewis applies principles of team based and blended learning in both nursing specific and interprofessional classes.

5F-1. Application of Theory in the Validation of IPE Premises and Pedagogy

Oral Presentation

- Irma Ruebling, Saint Louis University, The Center Interprofessional Education & Research, St. Louis, MO, USA
- David Pole, Saint Louis University, St. Louis, MO, USA
- Darina Sargeant, Saint Louis University, Doisy College of Health Sciences, St. Louis, MO, USA

Submitted abstract:

Background: While IPE has been challenged as lacking theoretical framework, learning theories are embedded in the process of “learning about, from, and with each other...to improve patient care”. Interprofessionality was introduced as an emerging concept by D’Amour and Onndasan (2005) as an approach to study the interprofessional nature of interventions in health professional education and practice and includes concepts of patient-centered care, collaboration, interdependence, and transformation. A retrospective analysis of the SLU-IPE programs has reinforced theoretical underpinnings of key premises that are embedded across the curriculum and outcome evaluations.

Objectives: The objectives of this project are to: 1) link theoretical approaches to the premises of our IPE curriculum, 2) explain the connection between these theoretical approaches and the premises upon which the curriculum is framed, and 3) determine the extent to which the related theoretical approaches support the learning activities of the curriculum.

Methods: IPE team members completed a review of the concepts, premises, competencies, and learning activities in preparation for reviewing the literature for theoretical concepts and learning approaches.
that could be used to examine the pedagogical strategies. The preliminary literature review included review articles on theories, theoretical frameworks and approaches as well as reference lists from these articles.

**Results:** Three theoretical categories were identified: social learning, experiential learning, and reflection. Learning theories were assigned to each category and were related to the IPE program premises and pedagogy. The theories were then used to assess the relevance and appropriateness of the learning activities of the curriculum.

**Implications:** This process is useful in validating the learning activities of IPE as being relevant toward accomplishing the planned outcomes. Those who have developed IPE can retrospectively apply theories that have been shown to be relevant for IPE with their existing program and more effectively assess and plan for change.

**5F-2. A case-based role play to promote communication and collaboration in first year students representing six health professions**

*Oral Presentation*

- **Margaret Purden,** McGill University, Ingram School of Nursing, Montréal, QC, Canada
- **Cynthia Perlman,** School of Physical and Occupational Therapy, Montréal, QC, Canada
- **Melanie Mondou,** Faculty of Medicine, Montréal, QC, Canada
- **Helene Ezer,** McGill University, Ingram School of Nursing, Montréal, QC, Canada

**Submitted abstract:**

**Background:** Teamwork and communication are core competencies of the Canadian Interprofessional Health Collaborative framework (2010). However, little is known about pedagogical strategies to promote effective learning about these competencies in first year students. A first attempt to introduce a role-play activity found that students were preoccupied with treatment outcomes rather than the process of learning to work together. As a result, revisions were made to the case scenario and facilitation of the session.

**Methods:** Didactic content was delivered in an online module. Forty-four groups that included 626 first year students from six different professions viewed a case presentation and role played how the team would work together to contribute to the care of the patient and family within their group. Students also acted as observers and reported on the nature of the exchanges that took place. Facilitators focused students’ discussions on the process of working together and the potential contributions of the different professionals participating in the care of the patient and family. At the end of the session, facilitators elicited students’ reactions to the format and content of the revised learning activity. Students and facilitators completed an evaluation of the session.

**Results:** Facilitators expressed greater satisfaction with the revised role play activity. Preliminary student evaluations indicate greater satisfaction and ability to engage in the revised learning activity and a better understanding of the different professional roles compared to previous cohorts. The results were also compared across the six professions.

**Implications:** A case-based role-play that enables students to experience working in a team and to discover the contributions of other professionals is valuable and appropriate even for students who are
in the early stages of their professional education. Contact time should focus on communication and collaboration between students as interprofessional education content can be delivered effectively online.

Author Biographies
Margaret chairs the IPE committee in the Faculty of Medicine, McGill University. Her research evaluates innovative pedagogical initiatives to enhance IPE. She has led interprofessional research teams and participated on special projects for Health Canada. The results have been disseminated nationally and internationally. Recent publications in the Journal of Interprofessional Care include cultural considerations in IPE and facilitating in the interprofessional context. She is a reviewer for the Journal of Research in Interprofessional Education.

5F-3. Innovative Evolution of an Interprofessional Prevention Course at Duke University Medical Center

Oral Presentation

- Betsy Melcher, Duke University, Durham, NC, USA
- Patricia Dieter, Duke University, Durham, NC, USA

Submitted abstract:
Investing in educational redesign around interprofessional teams early in healthcare learning can be rigorous and valuable. In 2009, faculty at Duke University worked together to design an interprofessional course on prevention and population health. This presentation will share our experiences and highlight curricular teamwork as it relates to these topics.

Background: In 2009, faculty from four healthcare professional programs at Duke University worked together to design an interprofessional course on prevention and population health. This course was created to encourage a collaborative experience among four educational programs (MD, PA, DPT, and Accelerated BSN) related to the team approach of improving health on a community level. The extensive educational redesign process has evolved to include various innovative ideas to promote student engagement and learning.

Objectives:
1. Describe strategic implementation of an interprofessional course at a large academic medical center
2. Discuss innovative methods incorporating asynchronous learning and technology for delivering content related to prevention education
3. Contrast how differences in professional curricula may influence course success
4. Share experiences with varying evaluation elements of an interprofessional prevention course.

Methods: This one credit course meets one afternoon a week for four consecutive weeks in the fall semester each year to date. The students are assigned to interprofessional teams and have the opportunity to participate in team based learning exercises, develop proposals for community intervention and engage with the medical center at large through partnership at a “Community Health Day” event.

Results: This course has celebrated challenges and successes over the past four years. Upon course completion, students have noted satisfaction with learning about, from and with other healthcare
learners. They have shared increased awareness of community based health initiatives and expressed interest in incorporating prevention into their future practice.

**Implications:** Investing in educational redesign around interprofessional teams at an early phase in healthcare learning can be rigorous and valuable. This course utilizes available resources and fosters professional connections among faculty and students that enhance communication strategies and teamwork as it relates to the fundamentals of prevention and population health.

**Author Biographies**

Betsy Melcher joined the faculty of the Department of Community & Family Medicine at Duke University in August 2010. She serves the Physician Assistant program as an Academic Coordinator and teaches across a spectrum of topics including prevention, orthopedics, anatomy, pediatrics and emergency medicine. She continues clinical practice one day per week with the Department of Anesthesiology at Duke University Medical Center.

Patricia Dieter is Professor of Community and Family Medicine at Duke University School of Medicine, and Physician Assistant Division Chief at Duke. A former member of the BOD of InterEd, she has worked interprofessionally with nurses, PAs, physical therapists, and physicians in developing interprofessional curricula at Duke.

**5F-4. The West Michigan Interprofessional Education Initiative**

*Oral Presentation*

- Jean Nagelkerk, Grand Valley State University, Grand Rapids, MI, USA
- Brenda Pawl, Grand Valley State University, Grand Rapids, MI, USA
- Dianne P. Wagner, Michigan State University, College of Human Medicine, East Lansing, MI, USA
- Lori Schuh, Spectrum Health Medical Group, Grand Rapids, MI, USA

**Submitted abstract:**

**Background:** In 2007, the Vice Provost for Health at Grand Valley State University (GVSU), the President of Grand Rapids Medical Education Partners (GRMEP), and the Associate Dean for College-wide Assessment from Michigan State University College of Human Medicine (MSU-CHM) met to develop the infrastructure for interprofessional education and practice for students and practitioners across the health professions programs and practice settings. From this meeting, the founding members established the West Michigan Interprofessional Education Initiative (WMIPEI). In 2009, Ferris State University (FSU) Colleges of Pharmacy and Optometry joined the partnership. The mission of the WMIPEI is to identify ways for the partners and members to develop collaborative, innovative, and interprofessional initiatives across disciplines, learning institutions, and health care systems.

**Goals:**

1. Integrate interprofessional learning throughout the curricula;
2. Identify, develop, implement, and assess interprofessional clinical experiences for teams of students to practice and learn about, from and with each other; and
3. Implement interprofessional scholarship across disciplines and institutions

**Methods:** To accomplish the work of the Initiative, an infrastructure of a steering committee with six champion workgroups was formed. A working alliance of community partners (140 members from 25
organizations) creates interprofessional collaborative practice sites in our communities. Collectively, these partners explore innovative approaches that integrate core competencies across healthcare disciplines into education and practice.

**Results:** The WMIPEI collaborative partnership has produced many valuable products. Examples include an annual conference and lunch & learn series for faculty and practitioners, an interprofessional practice on-line educational program, an interprofessional preceptor manual, and a student organization (Promoting Interprofessional Education for Students).

**Implications:** The WMIPEI regional infrastructure is an exemplar of one approach for communities to develop collaborations among practice partners and academic institutions to infuse interprofessional education and collaborative practice in education and patient care.

**Author Biographies**
Jean Nagelkerk, PhD, FNP-BC - As the Vice Provost for Health at Grand Valley State University Dr. Nagelkerk strengthens and expands partnerships and implements innovative initiatives in collaboration with local, regional, state and national organizations. Dr. Nagelkerk also leads the West Michigan Interprofessional Education Initiative, a regional inter-institutional interprofessional education and practice initiative involving multiple organizations and disciplines

Brenda Pawl, MSN, FNP-BC is the Director of Special Projects within the Office of the Vice Provost for Health at Grand Valley State University. As one of her commitments, she manages and organizes all of the resources required for the annual endeavors of the West Michigan Interprofessional Education Initiative. She is also a Family Nurse Practitioner with 30 years of health care experience. Mrs. Pawl’s areas of expertise include; interprofessional education, collaborative practice, women’s health and pain management.

Dianne Wagner, M.D. - As the Associate Dean for College-wide Assessment at Michigan State University’s College of Human Medicine Dr. Wagner was instrumental in ensuring Michigan State University’s commitment to the establishment of the West Michigan Interprofessional Education Initiative. Dr. Wagner is a General Internal Medicine Internist with a special interest in integrating Interprofessional Education to improve patient safety and outcomes.

**5G-1. The relationship between professional identities and teachers of interprofessional education (IPE) – a new model**

**Oral Presentation**

- Richard Gray, CAIPE, UK

**Submitted abstract:**

**Background:** Making effective transitions between different professional identities is integral to the development of mature interprofessional teachers (Niemi, 1997; Turner, 1999). If this is not taken into account, unanticipated difficulties can occur which by blocking development can be a recipe for disaster. This presentation is based on an EdD thesis (Gray 2010) and links with theme 7 “Theories, models, measurement and evaluation”.

**Objectives:** Training and accreditation of interprofessional teachers should be a priority (Horder, 2004). Of particular importance and fundamental to the whole concept of IPE is the need for teachers to
develop their own interprofessional identity (Volkman and Anderson, 1998) built upon firm foundations of professional, mono-professional teaching and interprofessional identities. How can these practically be incorporated into teacher preparation?

**Methods:** All UK medical schools were surveyed by questionnaire to assess whether IPE is occurring and the extent and nature of preparation for teachers of IPE. A second questionnaire was sent to medical schools reporting preparation for IPE teaching to ascertain the content, process and perceptions of those involved. Organisers and participants of IPE teacher preparation sessions were interviewed by telephone and further teacher preparation sessions were observed. Qualitative data were analysed by content analysis.

**Results:** In analysing the data the relationship between factors that contribute to undergraduate IPE was explored. The findings indicate that major factors relating to IPE are underpinned by the necessary development of an IPE identity. Of particular importance is the need for teachers to develop their own interprofessional teaching identity.

**Implications:** Making effective transitions between different professional identities is integral to the development of mature interprofessional teachers. Practical ways of incorporating professional identity issues into IPE teacher preparation are proposed and a developmental pathway suggested by the use of a new model.

**References**


**Author Biographies**

Richard was elected CAIPE Chair in 2013. He is past present President of the General Practice with Primary Health Care Section of the Royal Society of Medicine and has a background as a general practitioner in Brighton. He is an Honorary Faculty Fellow, University of Brighton. He previously was Principal Lecturer in Primary Care at the Brighton and Sussex Medical School and has a particular interest in the preparation and support of IPE teachers.

**5G-2. BRIDGE - a model designed to enhance interprofessional collaboration, knowledge and patient involvement**

*Oral Presentation*

- **Winnie Lund**, Center for Human Resources, HR Development, Copenhagen, Denmark
- **Anette Lykke Nielson**, Center for Human Resources, HR Development, Copenhagen, Denmark
• Jette Steenborg Holtzmann, Center for Human Resources, HR Development, Copenhagen, Denmark

Submitted abstract:

Background: Patients are faced with challenges in relation to obtaining seamless care. The health care professionals have been educated in and often work in silos and the organizational structures are not designed to overcome these challenges.

- Objectives: Enhanced patient involvement, relational coordination and leadership engagement.
- Improved quality of care and creating seamless patient pathways for the elderly patients.

Methods: The target groups are health care professionals across primary and secondary settings. The BRIDGE model is a joint venture between a hospital and the communities of the catchment area. During 2013 three processes have been established with the participation of three hospitals, nine municipalities, 90 health care professionals, 70 leaders and 25 users of the health service.

The BRIDGE model consists of several central activities. Local key stakeholders are identified and function as planning committee. This committee engages with leadership teams to ensure engagement and involvement. A Kick Off is held followed by three modules of each three days. The participants create a specific collaboration activity designed to enhance seamless care across the settings. This is followed by presentation for leaders and patients and lastly three knowledge seminars are held to ensure sustainability. This process takes 4 – 6 months.

Results: The BRIDGE model has been evaluated within the theoretical frame of Program Theory. The results show that participants have enhanced knowledge and actions regarding patient involvement, coordination and communication across primary and secondary sector. The relational coordination has increased and the participants have gained mutual respect, shared knowledge and shared objectives.

Implications: The BRIDGE model has been used within the somatic elderly patient pathways, but the results indicate that it can be transferred into other pathways characterized by complexity, a need for seamless care and multiple health care professionals.

Author Biographies

Winnie Lund, RN, MPH, development consultant and project leader at HR & Education, The Capital Region of Denmark. Experienced within fragmented care within psychiatric users and international health in the development world. Board member of The Danish User Organization ‘SIND’ working with Mental Health Uganda

Anette Nielson, RN, Certified Senior Project Manager IPMA level B. Development consultant at HR & Education, The Capital Region of Denmark. Has worked within the last 15 years with competence and organizational development. Extensive experience with educational courses across settings for leaders and employees and educational head of the Danish version of the Ehpic course.

Jette S. Holtzmann, RN, MA, Head of Office at HR & Education, The Capital Region of Denmark. Has worked with interprofessional education and collaboration within the last five years and has been co-founder and is board member in the Danish Society of Interprofessional Learning and Collaboration. Extensive experience with leadership and post-graduate educational activities for health care

5G-3. A theory-based approach to designing, delivering, and evaluating continuing interprofessional education (CIPE) activities

Oral Presentation

- John Owen, University of Virginia, Charlottesville, VA, USA
- Valentina Brashers, University of Virginia, Charlottesville, VA, USA

Submitted abstract:

Background: Continuing interprofessional education (CIPE) is interactive learning where health professionals learn about, from, and with each other. The learning theories that underpin CIPE differ from those applied to traditional continuing education (CE). It is essential for educators to understand this difference in order to design and evaluate effective CIPE programs.

Objectives: To describe the application of CIPE learning theories to the development of learning objectives, educational methods, and program assessment for a faculty and clinician CIPE program implemented to enhance healthcare team collaboration in sepsis care.

Methods: CIPE learning theories were linked with the practical steps in designing, implementing and evaluating this CIPE program. Learning theories that support CIPE and which differ from those used for traditional CE include social identity theory, socio-cultural theory, reflective and experiential learning, and learning within communities of practice. The CIPE program that resulted from this process included basic IPE concepts, a sepsis simulation case, and participant generation of a list of “gold standard” collaborative behaviors (called a “Collaborative Care Best Practices Model”) for effective team-based implementation of the Surviving Sepsis Guidelines. Program assessment included pre and post testing using the Readiness for Interprofessional Learning Scale and a tool created for participants to assign appropriate clinician role responsibility for each step in sepsis guideline implementation. A “commitment-to-change” strategy was used to identify future changes in collaborative behaviors.

Results: Over 90% of participants agreed or strongly agreed that the CIPE program was relevant to their work and 86% indicated that it encouraged them to change their practice. Pre/post role identification changes occurred, most often with nurses and respiratory therapists being given more responsibility. Health care professionals identified one or more “gold standard” collaborative behaviors to promote in their own practices.

Implications: Application of theory supports the design, implementation, and evaluation of effective CIPE programs.

Author Biographies

John Owen, EdD, MSc, is a Clinical Assistant Professor, School of Nursing, and faculty member, School of Medicine. He is the Associate Director, Center for Academic Strategic Partnerships for Interprofessional Research and Education, a Co-PI for an IPE project entitled “Bridging the Gap: Developing, Implementing, and Assessing the Impact of Innovative Undergraduate Interprofessional Education (IPE) Experiences Based on Collaborative Care Best Practice Models,” funded by the Josiah Macy, Jr. Foundation, and a CME Project Manager.
Valentina Brashers MD, FACP, FNAP is a professor of nursing and attending physician at the University of Virginia Schools of Nursing and Medicine. She is the founding co-Director of the University of Virginia Center for Academic Strategic Partnerships for Interprofessional Research and Education (ASPIRE). Dr. Brashers is nationally recognized for her research and scholarship in interprofessional education and provides consultations on interprofessional education to health professions schools and care delivery organizations across the country.

5G-4. The Leicester Model of Interprofessional Education underpinned by theory: Sharing experiences of leading learning which benefits patients and prepares students for collaborative practice alongside practice-teams

Oral Presentation

- Elizabeth Anderson, University of Leicester, Leicester, UK
- Daniel Kinnair, Leicestershire Partnership Trust, Leicester, UK
- Jenny Ford, De Montfort University, Leicester, UK
- Sezer Domac, University of Leicester, Leicester, UK

Submitted abstract:

Background: The Leicester Model was designed in response to consultation with an inner city community and primary healthcare team and initially with medical students. From its early beginnings, in 1995, it has been advanced using an iterative process and empirical research.1,2 Today the model has been replicated and adapted and continues to be delivered during times of economic constraints and pressures on front-line staff.3 This is because the model allows students to work along-side practice teams who benefit for the learning personally and professionally. Our evidence shows that students change practice and enhance the quality of care delivery.4

Objectives: The workshop will outline a pedagogical model grounded in the principles of best practice which is adaptable and responsive and can to be applied in any health and or social care setting. After completing this workshop participants will be able to:

- Understand the theoretical principles underpinning this practice-based IPE model which prepares students for future practice
- Explore the model in relationship to other approaches to practice-based IPE
- Establish a practice community involving patients who can support and sustain practice-based IP student learning
- Establish a research question to test out the model in a health care setting of their choice

Methods:

1. The workshop will start with a short presentation on the Model and its use and application across several projects, health inequalities, mental health, polypharmacy in the elderly, discharge planning and communication for effective listening skills.
2. Participants will then complete a short interactive table quiz to ensure everyone understands about the theoretical issues of the model. Completing the quiz will depend upon using each other’s expertise and reading about relevant theories of learning and establishing communities of practice.
3. Each participant will be offered a development plan to complete on how to adapt and adopt the model within their local area.
4. The workshop will conclude with sharing the possibilities and research questions that could be generated to advance our shared understanding of this practice-based model.
References
1. The Leicester Model of Practice-based Interprofessional education: http://www.medev.ac.uk/resources/articles-and-reports-special-reports/

Author Biographies
Liz Anderson, from an early clinical career (nurse, midwife and health visitor) has led innovations in medical education and led the design of an IPE curriculum shared by three universities, in S. Midlands, UK. She is a National Teaching Fellow. She has served on several national boards for the enhancement of professional education (including CAIPE) and has published widely on IPE.

Sezer Domac is a qualified social worker. He currently works a senior manager at Social Services (Local Authority), recently obtained his PhD at Leicester University. He is a consultant to provide a variety of deliverable outcomes for the EU-funded projects ‘Promoting Services for People with Disabilities’ in collaboration with the WHO team in Turkey since September 2013. The project beneficiaries of this work have been the Ministry of Health and Ministry of Family and Social Policies.

Jenny Ford worked as a speech and language therapist specialising in children with complex needs before joining De Montfort University to work in pre-registration speech and language therapy education. She has been a key member of the regional Strategic group developing IPE for pre-registration students. She is Operational IPE Lead in the faculty of Health and Life Sciences at De Montfort, a CAIPE Board member and one of the co-ordinators of the CAIPE Student Network.

Neena Lakhani is a senior lecturer in clinical pharmacy and pharmacy practice. She is also a practicing pharmacist and Chair of the Leicestershire and Rutland Pharmaceutical Committee. She has trained and worked in hospital, community and primary care settings. She firmly endorses that IPE is integral to providing a ‘fully integrated, patient centred service’ in the modern NHS.

Dan Kinnairqualified as a Leicester graduate and has gone onto work in psychiatry where he is now a consultant working in the inner city. He is a CAIPE Board member and supports IPE within clinical education at undergraduate and post-graduate levels.

5H. Nexus Innovations Incubator and the National Center Data Repository
Panel Presentation
Program abstract: The Nexus Innovations Incubator, a signature program of National Center for Interprofessional Practice and Education, and its related National Center Data Repository has been created to demonstrate that linking education with collaborative practice through interprofessional models will improve Triple Aim health outcomes. This session will showcase program and research framework and early outcomes.
• Frank Cerra, University of Minnesota, Minneapolis, MN, USA
• Connie Delaney, University of Minnesota, Minneapolis, MN, USA
• Nawal Lutfiyya, University of Minnesota, Minneapolis, MN, USA
• Janet Shanedling, University of Minnesota, Minneapolis, MN, USA
• Judith Pechacek, University of Minnesota, Minneapolis, MN, USA
• Andrea L. Pfeifle, University of Kentucky, Lexington, KY, USA

Submitted abstract:

Background: The Nexus Innovations Innovations Incubator, a signature program of the National Center for Interprofessional Practice and Education, is focused on a goal of a team-based system that focuses on health and the engagement of patients, families and communities. For sustainable change, the National Center recognizes the need for evidence. To produce that evidence, the National Center Data Repository has been created to demonstrate that linking education with collaborative practice through interprofessional models will improve Triple Aim health outcomes. The Data Repository is collecting research to establish the compelling business case for investment in interprofessional practice and education, including:

- Interprofessional Education – approaches to preparing team-ready health professionals
- Collaborative Practice – models of team-based health-focused practice
- The Nexus- interaction between health professions education and health systems
- Health Outcomes – health status of individuals and populations who benefit from interprofessional practice and education.

The National Center has engaged eight members for the Pioneer cohort of the Nexus Innovations Incubator, each with a track record of implementing large scale interprofessional practice and education. The pioneer members are helping to define a national framework and core data set, develop tools for research and development, while providing feedback to the National Center.

Objectives:
1. To share information about the Nexus framework of the National Center Data Repository, including the research questions and approaches of the “pioneer” cohort of 8 sites around the country
2. To learn early findings of the Nexus linkages emerging from data collected through the Nexus Innovations Incubator use of the National Center Data Repository
3. To learn more about how to prepare local Nexus environments for collaborative research to demonstrate outcomes.

Methods: Brief presentations by panel members to highlight program and research elements of the Nexus Innovations Incubator and National Center Data Repository. Facilitated dialogue with participants to delve into specific areas of interest and inquiry.

Results and Implications: To build national awareness of the research model being employed by the National Center for Interprofessional Practice and Education to establish the business case for investment in interprofessional practice and education. To share criteria for future participation in the Nexus Innovations Incubator.

Author Biographies
Frank B. Cerra, MD, is a senior advisor for the National Center for Interprofessional Practice and Education. He is emeritus senior vice president for health sciences and the McKnight Presidential
Leadership Chair at the University of Minnesota, where he played a major role in the shaping of interprofessional education, practice and research at the University and throughout the state.

Connie White Delaney, PhD, RN, FAAN, FACMI, is dean & professor, School of Nursing, University of Minnesota and director, biomedical health informatics. She is the co-developer of the nationally recognized Nursing Management Minimum Data Set, research related to the USA NMDS, and co-founder of the international Nursing Minimum Data Set (iNMDs), and co-developer of computational modeling and simulation for educational nursing administration. Dean Delaney serves on the executive team for the National Center.

M. Nawal Lutfiyaa, PhD, is a chronic disease epidemiologist and a senior research scientist at the National Center for Interprofessional Practice and Education. Nawal trained at the University of Iowa in Iowa City and the University of Massachusetts at Amherst. She took her undergraduate training in sociology and social psychology at the University of Manitoba. Nawal has completed both post-doctoral and fellowship training. She is well published and her work can be found in a wide variety of journals.

Judith Pechacek, DNP, CENP, RN, is a clinical assistant professor at the University of Minnesota School of Nursing, teaching in the health innovation and leadership program. Before joining the University of Minnesota, Judith served as vice president of patient care and chief nursing officer at Fairview Health Services.

Janet Shanedling, PhD, is program manager, Nexus Innovations Incubator, and director, Academic Health Center educational development. Her expertise is in the development of curriculum and instructional programs for health professions students and professionals, and she has directed a team that collaborates with health professions faculty to develop eLearning, videographic, and simulation courseware and assessment tools.

5I. Designing, Delivering, and Evaluating Interprofessional Case Conferences (ICC) For Health Professional Trainees

Workshop

Program abstract: Interprofessional collaboration (IPC) is widely recognized as an important part of quality primary care and favorable patient outcomes. However, many health training programs provide inadequate opportunities for trainees to develop this IPC knowledge and skills. Interprofessional Case Conferences (ICC) can address this gap. This workshop will look at IPC within the ICC models.

- **Shalini Patel**, University of California San Francisco / San Francisco VA, San Francisco, CA, USA
- **Christina Kim**, University of California San Francisco / San Francisco VA, San Francisco, CA, USA
- **Meg Pearson**, University of California San Francisco / San Francisco VA, San Francisco, CA, USA
- **Melissa Bachhuber**, University of California San Francisco / San Francisco VA, San Francisco, CA, USA
- **Bridget O’Brien**, University of California San Francisco / San Francisco VA, San Francisco, CA, USA

Submitted abstract:
Interprofessional collaboration (IPC) is widely recognized as an important part of quality primary care and favorable patient outcomes. However, many health professional training programs provide inadequate opportunities for trainees to develop the knowledge, skills, and attitudes needed for IPC. Interprofessional Case Conferences (ICC) can address this gap by providing opportunities for participants
from multiple professions to learn with, from and about each other through discussion of real patient cases and actionable strategies for care plans. (Craddock, et al. 2006)

The San Francisco VA’s Center of Excellence in Primary Care Education has developed several types of ICCs to teach and reinforce a culture of interprofessional collaboration in primary care through interactive, trainee-led conferences. The conferences occur in clinics that function as patient centered medical homes and use a team-based approach to patient care. Health professional trainees include residents from psychiatry, medicine and pharmacy; medical and nurse practitioner (NP) students, NP and psychology fellows, dietetic trainees, podiatry trainees, and subspecialty fellows. In this workshop we will describe several models of ICC’s, highlighting key elements such as:

1. Types of Cases and Case Selection Criteria: focus on complex diabetic patients, medically and psychosocially complex patients, or high risk patients
2. Resources and Preparation: amount of coaching and mentoring provided by faculty in preparation for the conference; amount of effort involved in preparing the case, inviting experts on relevant topics.
3. Frequency and Length: Weekly, bi-monthly, or monthly; 30min to 90min.
4. Facilitation: trainee-led or faculty-led
5. Evaluation: participant satisfaction; review of care plans; follow up on patient outcomes.

We will describe best practices among the ICCs, including 1) fostering a collaborative learning environment; 2) coaching trainees on case selection and preparation of case presentation; 3) facilitating engagement of learners and faculty from various health professions; 4) role modeling collaborative practice; and 5) creating a care plan based on multidisciplinary feedback.

Implementation challenges common to conferences, such as engaging all health professions trainees successfully, will be discussed. Potential strengths and weaknesses of each of the three models will be compared and contrasted. These include amount of preparation by trainees or facilitators prior to conferences, frequency, and measuring outcomes from conference discussions. Conference evaluation tools include participant evaluations of the conference, self-evaluation of IPC-related knowledge and skills, and follow-up of care plans created during the conference.

This workshop will consist of three parts:
Part I: Large group presentation (30 min)
- Highlight the importance of interprofessional collaboration in primary care and the need for structured curricula to support IPC competence among health professional trainees.
- Provide an overview of ICC models and key elements
- Review best practices and challenges seen in ICC models. Compare strengths and weaknesses of each model.

Part II: Small group breakout sessions (30 min)
- Participants discuss opportunities and barriers to implementing an ICC in an interprofessional learning environment in their own institution. Each small group will be facilitated by one of the workshop leaders.

Part III: Large group facilitated discussion (30 min)
- Participants share key ideas from small groups.
- Describe and discuss different tools and techniques for evaluation of ICCs.
- Summarize key elements of successful facilitation for interprofessional case conferences.
Author Biographies

Melissa Bachhuber, MD is a UCSF Assistant Clinical Professor. She practices primary care and hospital medicine at the San Francisco VA Medical Center and educates trainees in these settings. She is a member of the Core Faculty for the VA Center of Excellence for Primary Care Education, an interprofessional training program in teambased care. She serves as the SFVA Deputy Associate Chief of Staff for Education and is a member of UCSF Teaching Scholars Program.

Christina Kim is a nurse practitioner and clinical faculty at UCSF. She works at a VA Homeless Center and at the San Francisco Department of Public Health. Her research and programming interests are in public health and improving access to care for vulnerable populations. She is part of the faculty team that leads the VA’s Center of Excellence in Primary Care, a 5-year initiative focused on interprofessional educational and training redesign for primary care.

Bridget O’Brien is the director of evaluation for the SFVA Center of Excellence for Primary Care Education and a faculty member in the UCSF Division of General Internal Medicine and the Office of Research and Development in Medical Education. Her research focuses on workplace learning and interprofessional communication.

Shalini Patel, MD is an Assistant Clinical Professor of Medicine at UCSF who works in primary care at the San Francisco VA (SFVA) Medical Center. She has an interest in primary care education, underserved medicine and interprofessional education. She serves as the SFVA community based clinics site director for their Center of Excellence in Primary Care Education, which emphasizes interprofessional primary care training. She is also the San Bruno VA community clinic medical director.

Meg Pearson, MD, is an Assistant Professor at UCSF. Her academic interests are in medical education, specifically ambulatory care and interprofessional education. She provides direct patient at the San Francisco VA Medical Center in primary care clinic, emergency room and inpatient medicine wards and also supervises residents, students and nurse practitioner trainees in these settings. She is the Co-Director for Longitudinal Clinical Experience, a core ambulatory clerkship for 3rd year medical students.

5K-1. Interprofessional Research, Education and Practice (iPREP) by Design

Oral Presentation

- Maria Dolce, Northeastern University, Boston, MA, USA
- Shan Mohammed, Northeastern University, Boston, MA, USA
- Kathryn Robinson, Northeastern University, Boston, MA, USA

Submitted abstract:

Background: Bouvé College of Health Sciences at Northeastern University is the largest health sciences college in Boston, MA whose mission is to inspire and create the next generation of interprofessional healthcare leaders for the well-being of our global community. Bouvé College established an integrated model for advancing innovations in interprofessional collaborative practice across its three schools – Nursing, Pharmacy, and Health Professions, and fostering inter-institutional collaborations. The iPREP Model engages students, faculty and researchers in interprofessional research, education and practice and reflects the core competencies for interprofessional collaborative practice to improve health for a global society.
Objectives: The purpose of this presentation is to disseminate a replicable and sustainable model for advancing innovations in interprofessional research, education, and practice across academic programs, schools and institutions. Participants will be able to apply principles and best practices to enable interprofessional collaboration for improving health.

Methods: The design of the iPREP Model will be discussed from a developmental perspective: creating awareness, aligning purpose, taking action, measuring performance, and achieving excellence. Innovations advanced from the iPREP Model will be described using Rogers’ five stages of the innovation process in organizations: agenda-setting, matching, redefining/restructuring, clarifying, routinizing.

Results: The iPREP Model provides a roadmap for advancing innovations in interprofessional research, education and practice to improve health. Innovations are designed to promote core competencies for interprofessional collaboration, and align with the triple aim to improve the patient experience of care, improve population health, and reduce the cost of health care.

Implications: The design of an integrated model to advance interprofessional collaborative practice requires alignment with core competencies for collaborative practice to advance innovations aimed at improving health. The sustainability of an integrated model relies on a collaborative leadership infrastructure.

5K-2. Assessing Student Learning Outcomes in Interprofessional Education

Oral Presentation

- Sylvia Langlois, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada
- Ashley Stirling, University of Toronto, Toronto, ON, Canada
- Zoraida Beekhoo, University of Toronto, Lawrence Bloomberg Faculty of Nursing, Toronto, ON, Canada
- Sharona Kanofsky, University of Toronto, Physician Assistant Program, Toronto, ON, Canada

Submitted abstract:

Background: The Centre for Interprofessional Education (IPE) at the University of Toronto is responsible for developing a curriculum to provide health professional students with the core competencies needed to become collaborative-practice ready. Guided by the Framework for the Development of Interprofessional Education Values and Core Competencies, IPE learning activities focus on enhancing students’ knowledge, skills and attitudes in interprofessional collaboration, communication, and values and ethics. Within the IPE curriculum each of these core-competencies are addressed across the student learning stages of exposure, immersion, and competence. The development of the IPE curriculum at the University of Toronto has been grounded in evidence-based practice and research. In order to assure the efficacy of the IPE curriculum, it is important to measure student acquisition of interprofessional core competencies; yet, as important as assessment is, this field has remained very challenging.

Objectives: The primary objective is to explore the types of assessment that can be used to measure the development of interprofessional core competencies.

Methods: Drawing upon research guidelines for assessing student learning outcomes in higher education, recommendations for developing an IPE assessment plan will be explored.
This presentation will review the various reasons for conducting IPE assessment, types of assessment, assessment methods, and considerations in the development of an IPE assessment plan.

**Results:** Participants will have an overview of assessment methodology that could be considered in determining development of interprofessional competencies. The experiences of one university will also be discussed. Using Miller’s (1990) Triangle/Model of Clinical Competence as a theoretical framework to approach student learning assessment in IPE, a number of questions for future research will be posed.

**Implications:** Assessment of interprofessional competencies is a critical step in the advancement of interprofessional education curricula. A broad understanding of possibilities will guide next steps in this process.

**Author Biographies**

Sylvia Langlois is the Faculty Lead for Curriculum, Centre for Interprofessional Education, and an Assistant Professor in Occupational Science and Occupational Therapy, University of Toronto. She has been involved in the development, assessment and implementation of the requisite, competency-based IPE curriculum at the University of Toronto since 1996. She chairs the InterFaculty Curriculum Committee and various working groups charged with the development and assessment of many core and elective learning activities.

Ashley Stirling earned her doctorate in the Department of Exercise Sciences at the University of Toronto, and was recently hired as a full-time Lecturer in the Faculty of Kinesiology & Physical Education at the University of Toronto. She has expertise in the areas of experiential learning, curriculum development and evaluation, athlete welfare, and athlete-centred coaching and currently serves as the faculty representative on the University of Toronto Interfaculty Curriculum Committee.

Zoraida Beekhoo earned her MA in Nursing from New York University. She became a Clinical Nurse Specialist in the area of Cardiovascular Nursing. In 2001, she joined the Bloomberg Faculty of Nursing at the University of Toronto where she is currently a Senior Lecturer in the Second Entry BScN Program. She regularly facilitates IPE learning activities within the IPE Curriculum and continues to be an active member on various working groups and advisory committees.

**5K-3. Situational Judgement Tests: Enhancing the values and skills of an Interprofessional Practitioner**

*Oral Presentation*

- **Elizabeth McConnell,** University of East Anglia, Centre for Interprofessional Practice, Norwich, Norfolk, UK
- **Susanne Lindqvist,** University of East Anglia, Centre for Interprofessional Practice, Norwich, Norfolk, UK

**Submitted abstract:**

**Background:** A recent report, following a scandal at a UK hospital, highlighted requirements for healthcare professionals to demonstrate necessary values, attitudes and behaviours associated with care delivery. Recommendations call for health and social care students to be offered education to meet these requirements. Situational Judgement Tests (SJTs) are one method to gauge students’ development of these attributes. Few case studies have been presented where SJTs have been
incorporated into students’ interprofessional learning (IPL). This study aims to evaluate the integration of SJTs in an existing IPL module for second-year students (IPL2).

**Objectives:**
1. Meaningfully integrate SJTs into IPL2
2. Evaluate student perceptions of SJTs in IPL2 in helping them develop the necessary attributes.

**Methodology:** Nursing, midwifery, operating department practice, medicine and pharmacy students take part in two 3-hour workshops. Students work together in small mixed professional groups. SJTs will involve two groups; one conducting the test and one observing. Both groups will participate in both tasks. Evaluation will be completed by all students, including both open-ended questions and Likert Scales (1-5). Data will be analysed using descriptive statistics of quantitative feedback data and main themes will be extracted from open ended questions. A focus group will be held with a mixed group of students to explore how SJTs impacted on their learning in more depth. Data will be transcribed verbatim and analysed thematically.

**Results:** The SJTs are currently in the process of being finalised. IPL2 will commence in January 2014 and be completed by 19th March 2014. Evaluation data will be analysed by end April. Focus group conducted by March 2014 and data analysed by April 2014. SJTs may be an effective way for students to explore how they would act in different situations together with peers from other healthcare professions so that they can discuss the possible implications of different actions to care delivery.

**Author Biographies**
Elizabeth McConnell joined the Centre for Interprofessional practice in February 2013, with a background in Psychological Therapies within the NHS.

Susanne Lindqvist joined the Centre of Interprofessional Practice in October 2002 Appointed Centre Director in 2005. Has published extensively on IPL

**5K-4. How does interprofessional education impact on healthcare students’ emotional Intelligence?**

**Oral Presentation**
- Hiroki Yasui, Nagoya University, Graduate school of Medicine, Nagoya, Aichi, Japan
- Keiko Abe, Nagoya University, Graduate School of Medicine, Nagoya, Aichi, Japan
- Manako Hanya, Meijo University, Faculty of Pharmacy, Nagoya, Aichi, Japan
- Nobuko Aida, Nagoya University, Graduate School of Medicine, Nagoya, Aichi, Japan

**Submitted abstract:**
**Background:** Inter-Professional Work (IPW) requires communication, self-control, empathy and respect for other professional roles. During IPW, healthcare students often have to manage own emotions. Emotional intelligence (EI) that involves perceiving, monitoring, regulating and managing emotions is important for IPW to deliver a patient care in teamwork. Inter-professional education (IPE) offers an opportunity to improve their EI.

**Objectives:** The aim of this pilot study is examine the healthcare students’ EI before and after IPE and at a six-months follow up.
Methods: The participants were 74 students (24 medical students, 25 pharmacy students, and 25 nursing students). Medical, pharmacy and nursing students are arranged in teams that collaborate to develop a patient care plan using simulated patients. Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF), Jefferson Scale of Physician Empathy (JSPE) was administered to the participants before and after the training and six-months after. TEIQue-SF and JSPE scores are examined using paired t-test; two way repeated measure ANOVA and multiple regression analysis.

Results: All of JSPE scores increased significantly after the IPE but decreased significantly at six-months follow up. TEIQue-SF score of pharmacy and nursing students increased significantly but decreased significantly at six-months follow up. Only medical students showed no change during the three time periods.

Implications: The results showed IPE was effective in improving students’ EI, except medical students. The possible explanation is that medical students had higher self-emotional efficacy than other healthcare students before IPE. IPE may have a short-term impact on healthcare students’ EI but it returns to the original level within 6 months. Continuous IPE is required to sustain the increased level in EI.

5M. Collaborative Interprofessional Teams Improving the Health of Urban Poor
Panel Presentation

Program abstract: This panel presentation will introduce a unique model of interprofessional team partnerships providing patient-centered care to an uninsured urban population. Participants will be able to: 1) explore a new model of interprofessional team partnerships working from a primary care setting; 2) understand the unique challenges and opportunities each interprofessional team faces in serving low-income, vulnerable populations; 3) gain strategies in developing an interprofessional working culture which differs from previous independent practices; and 4) experience the struggles and triumphs of ensuring positive health outcomes for needy clients through collaboration with diverse interprofessional teams.

- Janet R. Buelow, Armstrong Atlantic State University, Savannah, GA, USA
- Anita Nivens, Armstrong Atlantic State University, Savannah, GA, USA
- Suzanne Cashman, University of Massachusetts Medical Center, Worcester, MA, USA
- Sister Pat Baber, St. Joseph’s/Candler Hospitals, Savannah, GA, USA

Submitted abstract:
This panel presentation will introduce a unique model of interprofessional team partnerships providing patient-centered care to an uninsured urban population. The target audience is health care practitioners interested in facilitating improved health outcomes for low-income, vulnerable clients. Participants will be able to: 1) explore a new model of interprofessional team partnerships working from a primary care setting; 2) understand the unique challenges and opportunities each interprofessional team faces in serving low-income, vulnerable populations; 3) gain strategies in developing an interprofessional working culture which differs from previous independent practices; and 4) experience the struggles and triumphs of ensuring positive health outcomes for needy clients through collaboration with diverse interprofessional teams.
**Background:** Saint Mary’s Health Clinic (SMHC) was established in 2005 as a free clinic offering the uninsured a basic primary care medical home. As a nurse managed clinic, it consisted of primarily nurse practitioners, a collaborating physician, a managing nurse and two community workers. In 2012 SMHC received a grant to expand into an interprofessional collaborative practice model consisting of several components: a core IP team with nurse practitioners, social workers, and a health educator; an IP practice partners team, which includes consulting physician specialists in cardiology, gynecology, psychiatry, gastroenterology, nephrology, and dentistry; and patient advocate teams, which focus on the patient’s social determinants of health. The movement from a primary care clinic to a true interprofessional team required education, feedback and much patience. Likewise, learning to collaborate with other IP teams requires training, flexibility and openness to new strategies and technologies.

**Methods:** A panel presenter will introduce each IP team within this unique model of collaborative practice. The core IP teams’ training, challenges and newly established processes will be presented. The IP practice partners’ processes of interacting with the core IP team and with patients will be discussed, as well as their satisfaction with this collaborative model. The coordinator for the IP patient advocacy teams will share how social determinants of health were addressed by the teams. The panel will also present a de-identified patient depicting how the collaboration of the IP teams facilitated improved health.

**Interactive Environment:** Conference participants in tables will be given short client cases, with various social, economic, and health challenges. They will then be asked to brainstorm how best to utilize the various IP teams to reach desired outcomes. To add to the challenge, participants will be given varied unique challenges in coordinating all IP teams and the vulnerable patient. A discussion of the various approaches to reaching desired patient outcomes will ensue.

**Expected Results & Implications:** All participants will leave this session with awareness of a unique collaborative model of IP teams and with ideas for overcoming expected challenges within collaborative interprofessional teams.

5R-1. Validation of a Workplace Assessment Tool for Interprofessional Collaboration (WATIC)

**Oral Presentation**

- **Valerie Banfield,** RN Professional Development Centre, Halifax, NS, Canada
- **Kelly Lackie,** RN Professional Development Centre, Halifax, NS, Canada

**Submitted abstract:**

**Background:** Health care providers (HCPs) are becoming aware of the benefits of interprofessional collaboration (IPC), yet many continue to struggle with the transformation from theory to practice, seeking direction in moving forward. An instrument that outlines the essential components for IPC at unit/organizational levels is required. Tools which measured a variety of factors associated with IPC in different practice/education settings were found in the literature; however, those that assessed the measures necessary to support IPC were lacking. The WATIC tool, designed to allow for a realistic assessment of the IPC supports within the workplace, was developed for HCPs wanting to advance IPC.

**Objectives:** To validate an assessment tool for practical use in the workplace that evaluates whether supports for IPC exist.
Methods: A two-tiered Delphi survey was conducted with IPC experts from across North America to achieve content and face validity of the WATIC. Experts were asked to rate the importance of each dimension and the accuracy and clarity of associated descriptors. Qualitative feedback was solicited via comment sections. Revisions were made when 70% of respondents assigned an “unimportant/somewhat important” value for the dimensions and/or a “disagree/strongly disagree” to the descriptors. Revisions to the wording of dimensions and descriptors were made based on thematic analysis of comments.

Results: Definitions that support understanding and use of the tool were refined. Dimensions and descriptors were revised to enhance clarity and accuracy. Some were expanded, while others were collapsed resulting in the final dimensions: Inclusion of Patient/Family, Team Meetings, Organizational Documents, Contributions to Care, Coordination of Care, Team Communication Tools, Team Leadership, Team Decision-Making, Conflict Management, and Organizational IPE Offerings.

Implications: A validated tool has been developed which will assist HCPs to evaluate their workplace for the supports necessary for IPC. Reliability testing will occur in the second phase of the study.

5R-2. Creative and Resourceful Interprofessional Clinical Experiences in Community Settings

Oral Presentation

- Laura Fennimore, UPMC Health Plan, Pittsburgh, PA, USA
- Linda A. Dudjak, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- Rose L. Hoffmann, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA

Submitted abstract:

Background: In 2011, a panel of experts, appointed by the Interprofessional Education Collaborative (IPEC) representing six professional organizations, issued a report that endorsed four core competency domains for interprofessional collaborative practice. These competencies, applicable to a broad spectrum of populations in a wide variety of settings, would inform the education of health professionals and enable them to engage in interactive practice outside their profession, at the clinical financial and regulatory level. To achieve the ultimate goal of a safer, more patient-centered health care system, faculty must create experiential learning opportunities that reinforce the importance of interprofessional teamwork focused on patient safety, resource management and improved outcomes within an evidenced-based practice philosophy. A fundamental responsibility of academic institutions is to engage clinical partners in developing a health workforce that is fluent in designing care delivery systems that deliver cost-effective approaches to meet patient, family, and community health care needs; and ensure that all disciplines practice to their full scope of expertise

Objectives:

1. Stimulate Collaboration with stakeholders within an integrated global health enterprise to create unique clinical opportunities for undergraduate and graduate nursing students that emphasize interprofessional teamwork and resource management
2. Discuss the barriers and facilitators to the development, implementation and evaluation of shared learning experiences with stakeholders from the global health enterprise
Methods: Students are offered the opportunity to participate in one of three unique opportunities that support interprofessional collaboration and teamwork; foster appreciation for the unique and complementary role of various health professionals; and facilitate knowledge and skill development in designing models of team-based, cost-effective, interdisciplinary care: (1) an intensive four week interprofessional teamwork rotation with a renal emphasis, (2) a four week rotation in care delivery from an insurance service division, and (3) a one week intensive rotation in a camp setting specializing in children with cardiac abnormalities. These experiences showcase the dynamic interplay of interprofessional teamwork, resource management and community care. This presentation will outline the process to design these clinical opportunities for both undergraduate and graduate nursing students that inform and refine the development of recommended core competencies.

Results: Barriers and facilitators to the design and implementation of the clinical experiences will be discussed in addition to qualitative feedback received from students, faculty and service preceptors.

Implications: Health care leaders within the academic and clinical setting are challenged to create an environment that models interdisciplinary collaboration as a means to clinical excellence and optimal efficiency. The economic implications associated with organizational performance on measures of quality and efficiency will increasingly drive workforce development and competitive strategy. Partnerships that replace fragmented care delivery based on silos and competition with the mastery of core competencies essential to teamwork and collaborative practice will emerge as the foundation for organizations prepared to meet the challenges of a new era of healthcare.

Author Biographies
Linda A Dudjak PhD RN, an associate professor at the University of Pittsburgh School of Nursing, teaches at the undergraduate and graduate level and is responsible for several core courses in the MSN and DNP Administration programs. Dr Dudjak has an extensive background as a healthcare executive in both academic and community settings and has lectured locally and nationally on topics related to value-based healthcare quality, clinical outcomes and evidence-based practice.

Laura A Fennimore, DNP, RN serves as the Director of Clinical Programs at the UPMC Health Plan where she oversees the case management team. Dr. Fennimore has served in a number of leadership roles at a large academic medical center hospital including clinical instructor, nurse manager, director of oncology disease management, director of nursing, and the director of organizational development and nursing education & research.

Rosemary L Hoffmann, PhD, RN, CNL is an associate professor at the University of Pittsburgh School of nursing, teaches at the undergraduate and graduate levels and coordinates the Clinical Nurse Leader MSN area of concentration. Dr. Hoffmann is the School of Nursing faculty representative for the Working Group on Interprofessional Education, comprised of faculty from the six schools of the health sciences at the University. She has lectured nationally and internationally on interprofessional education.

5R-3. The benefits of informal interprofessional learning experiences in the clinical education setting

Oral Presentation

- Amber Fitzsimmons, University of California San Francisco, San Francisco, CA, USA
- Kimberly Topp, University of California San Francisco, San Francisco, CA, USA
Submitted abstract:

**Background:** Literature reports that interprofessional education initiatives primarily focus on formal, structured and explicit programs that occur mainly in structured classroom activities, small group settings, standardized patient exercises and post-licensure initiatives. Clinical education settings seem ideal for interprofessional learning given the authenticity of the workplace environment. Insight into physical therapy students’ perceptions of interprofessional learning experiences in clinical settings will help to inform pedagogical strategies for the development of entry-level doctorate physical therapists who are immediately ready for collaborative practice.

**Methods:** After first year physical therapy subjects completed their first eight-week clinical rotation in either an acute care or outpatient facility, we conducted semi-structured, one-on-one interviews (n=26) in order to:

- Compare the context and nature of the interprofessional learning experiences of physical therapy students in differing clinical education placements, including inpatient and outpatient clinical settings.
- Describe the breadth of perceived learning outcomes that occurred during informal and unplanned interprofessional clinical experiences.

**Results:** The results of the qualitative analysis provided insight into both the context and nature of informal interprofessional learning experiences during the eight-week clinical clerkships in inpatient and outpatient clinical settings. Foremost, acute care settings offered the most frequent, diverse and synchronous interprofessional learning experiences. The results also revealed key themes of the students’ perceptions of their learning outcomes during these informal and unplanned clinical experiences such as developing clinical practice reflexivity, good communication skills and importance of building trusting relationships. Additionally, students reported that these impactful learning experiences offered further development of their professional identity, a holistic understanding of the patient and an introduction into referral practice.

**Conclusions:** The benefits of informal, unstructured and unplanned interprofessional learning experiences in various types of clinical settings facilitates authentic interprofessional educational efforts and helps to guide faculty in tailoring IPE initiatives for competency based interprofessional education standards in physical therapy curriculum.

*1,2 Nisbit 2013, Reeves et al., 2010*

5R-4. Changes of IPE Perceptions among First Year Health Students after an IPE Exposure

**Oral Presentation**

- **Benny Efendie,** Monash University Malaysia, Kuala Lumpur, Malaysia
- **Nabishah Mohamad,** Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia
- **John Gilbert,** University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada

Submitted abstract:

**Background:** The National University of Malaysia (UKM) first introduced IPE between medical and pharmacy students in 2008. Four years later in 2011, IPE was offered to first year undergraduate
students from the faculties of medicine, dentistry, pharmacy and health sciences in the form of a co- 
curriculum. Eighty seven students enrolled and were divided into groups of 9 to 11 from different 
faculties. Group activities included presentation and observation of the roles of different health 
professions, and engagement in a community project. The purpose of this study was to investigate 
whether there is a change in student’s perception about IPE, after the completion of the module.

Methods: Before and after the undertaking the module the students were asked to complete a 5-option 
Likert scale questionnaire consisting of 20 items assessing their perception about IPE. The differences 
between scores, pre and post experience, were analysed using Chi-Square and paired t-test.

Results: Sixty four students completed the questionnaire. Overall, there was an improvement in the 
score of all items after completion of the module. At the beginning, 75% agreed that IPE would help 
them communicate better with other professionals. At completion, agreement increased to 91% (the 
mean score increased from 4.00 to 4.34, P = 0.075). IPE was seen to be helpful in understanding other 
profession’s roles (the mean score increased from 3.88 to 4.38, P=0.031). More students (81%) favoured 
the introduction of IPE in the early years of their undergraduate study. Slightly more (92%) thought that 
IPE would increase their understanding of clinical problem as compared to basic sciences (81%). There 
were no significant differences between students from the different programs. At the end of the course 
the majority of the students (92%) indicated that they welcomed the opportunity to learn with other 
healthcare students.

Conclusion: The IPE module presented improved the perceptions on IPE among the first year students of 
a number of different health professional education programs.

5S-1. Interprofessional service learning to promote community disaster readiness

Oral Presentation

- Steven Jacobs, Centennial College, Toronto, ON, Canada
- Ellen Bull, Centennial College, Toronto, ON, Canada
- Lynda Atack, Centennial College, Toronto, ON, Canada

Submitted abstract:

Background: Population vulnerability to disaster is increasing worldwide for reasons such as population 
growth, an aging population and aging infrastructures. The Red Cross has developed the program, Ready 
When the Time Comes, with online and workshop components, to provide surge capacity of reservist 
volunteers in the event of a major disaster.

Objectives: Centennial College, in Toronto, Canada partnered with the Canadian Red Cross to provide 
nursing, paramedic, pharmacy technician and massage therapy students, faculty and staff with an 
innovative, interprofessional, service learning education experience. The goal was to develop 
interprofessional and intersectoral collaborative and disaster management skills and improve 
community health outcomes in a disaster.

Methods: A research project, using Kirkpatrick’s model, was conducted using surveys to measure 
participants’ reaction to the program, knowledge gains about disaster management content, Red Cross 
processes and interprofessional volunteer roles in a disaster. The study also examined factors that 
motivated participants to volunteer for training and eventual field deployment.
Results: Fifty-six participants completed the program. Most volunteered for reasons related to intrinsic motivation; the program aligned with their self-image as a ‘helper’. Participants were very satisfied with their training and made statistically significant increases in disaster role test scores. Participants indicated that they were clear on the chain of command in a disaster and their role on the interprofessional team. All participants indicated that they would be willing to be put on the reserve list for such an event.

Implications: These results suggest that a short, mixed online and workshop training program can be effective in preparing community members for a volunteer role in the event of a disaster. The study participants benefited as did the Canadian Red Cross which added to its cohort of disaster-prepared volunteers in the region thereby potentially improving population health outcomes in the event of a disaster.

5S-2. Facilitating an interprofessional approach to critical care: a multicenter qualitative study

Oral Presentation

- Deena Kelly, University of Pittsburgh, Clinical Research and Investigation Systems Modeling of Acute Illness Center, Pittsburgh, PA, USA
- Jeremy Kahn, University of Pittsburgh, Clinical Research and Investigation Systems Modeling of Acute Illness Center, Pittsburgh, PA, USA
- Frances K. Barg, University of Pennsylvania, Perelman School of Medicine, Philadelphia, PA, USA
- David A. Asch, University of Pennsylvania, Perelman School of Medicine, Philadelphia, PA, USA

Submitted abstract:

Purpose: An expanding body of evidence supports the value of an interprofessional approach to critical care, but little is known about strategies to promote this approach. We sought to describe clinician perceptions about interprofessional care and the factors that are associated with improved collaboration in the intensive care unit.

Methods: We performed a multicenter, qualitative study in 7 community and academic hospitals in southeastern Pennsylvania. Semi-structured interviews were conducted with 64 critical care clinicians, including physicians (n=7), nurse managers (n=9), staff nurses (n=22), respiratory therapists (n=15), clinical pharmacists (n=5) and dieticians (n=6). Interviews were analyzed using modified grounded theory.

Results: Critical care providers view an interprofessional approach as essential for quality. Two underlying types of factors can facilitate an interprofessional approach, which we call “structural facilitators” and and “cultural facilitators”. Structural facilitators are concrete care processes that facilitate collaboration between care providers such as clinical protocols, checklists, daily interdisciplinary rounds and information technology. Cultural facilitators are organizational constructs that support the interprofessional team’s shared goals including accessibility, trust, value and leadership. In practice, structural and cultural facilitators work in concert to improve the effectiveness of interprofessional ICU care.
Conclusions: Interprofessional care not only acknowledges the complexities of modern critical care but also recognizes the need for communication and collaboration within the ICU organization. The structural and cultural facilitators articulated by study subjects can be used to better understand the interprofessional ICU environment, informing initiatives to measure and improve collaborative care in the intensive care unit.

Author Biographies
Deena M. Kelly is a postdoctoral scholar at the University of Pittsburgh with interests in interprofessional practice and alternative care models. Frances K. Barg is an Associate Professor at the University of Pennsylvania. David A. Asch is Professor and Executive Director of the Center for Health Care Innovation at the University of Pennsylvania. Jeremy M. Kahn is an Associate Professor of Critical Care Medicine and Health Policy and Management at the University of Pittsburgh.

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5S-3. Emergency Medicine Collaborative: Interprofessional Practice in Emergency Care
Oral Presentation
- Lindsey Eberman, Indiana State University, Terre Haute, IN, USA
- David Williams, Indiana State University, Terre Haute, IN, USA
- Laura Livingston, Indiana State University, Terre Haute, IN, USA
- Jack Jaeger, Indiana State University, Terre Haute, IN, USA
- Michelle Landis, Indiana State University, Terre Haute, IN, USA

Submitted abstract:
We conducted an emergency medicine collaborative using simulation to educate health care students regarding roles of medical providers transitioning from on-site/field, transport and emergency room care. We also disseminated new knowledge about best practices using published evidence. Post-professional athletic training (AT) (n=27), professional nursing (n=13), and professional physician assistant (PA) (n=31) students participated in the event. The goals were to: 1) learn the roles and responsibilities of other health care; 2) use a teamed approach to patient care; 3) use interprofessional communication skills to transfer patient care. We used high-fidelity human patient simulators for our cervical-spine injured athlete, concussion management, and myocardial infarction; and live standardized patients for the heat stroke and femoral fracture patients. A facilitator provided a brief description of each simulation, asked students to act and stimulated discourse on evidence-based techniques. After each group experienced the on-site/on-field activity, we reconvened to watch prepared videos of patient transport inside an ambulance. After each transport video, we transitioned to a live feed of our mock emergency room. During each phase of treatment, one discipline lead in patient care. After each mock emergency, we used active reflection to identify best practices and potential discipline disconnect. We used the Group Skills Evaluation tool indicating that all team members perceived they contributed to discussion (92.3%, n=12/13), to his/her role or discipline (92.3%, n=12/13), and spoke freely within the group (84.6%, n=11/13). We also used a role evaluation tool to assess student’s knowledge and determined that in most examples, our respondents were knowledgeable about their limitations and the roles of others. Finally, we determined that the students overwhelmingly reported that they learned from (4.5±0.7), with (4.0±0.7), and about (4.1±0.4) each other and believed the activity was beneficial (4.1±0.6). The large scale high-fidelity simulation proved beneficial for educating students on interprofessional roles and behaviors.
5S-4. Evaluation of Crisis Team Training (CTT): Comparing a task completion checklist with team assessment using the Ottawa Crisis Resource Management Global Rating Scale

Oral Presentation

- Ashleigh Grieben, University of Pittsburgh, Pittsburgh, PA, USA
- Hiroko Iwashita, Dokkyo Medical University Koshigaya Hospital, Koshigaya, Saitama, Japan
- Lillian Emlet, UPMC, Pittsburgh, PA, USA
- Benjamin Berg, University of Hawaii, Honolulu, HI, USA
- Richard Henker, University of Pittsburgh, Pittsburgh, PA, USA

Submitted abstract:
Introduction/Purpose: The Crisis Team Training (CTT) simulation course conducted at the Peter M. Winter Institute of Simulation Education and Research (WISER) emphasizes communication and teamwork during crisis response training for inter-professional teams within the University of Pittsburgh Medical Center. There are various team performance checklists and non-technical skills team assessments that have been used and validated to evaluate simulation methods of teaching. We chose the Ottawa Crisis Resource Management Global Rating Scale (CRMGRS) due to its prior validation in similar populations. The purpose of this study was to evaluate how CTT task completion checklists compared to team performance as measured using the Ottawa Crisis Resource Management Global Rating Scale.

Methods: CTT checklist, scenario outcomes and CRMGRS were compared for training scenarios from 52 CTT classes conducted at WISER from February 2007 to April 2012. CTT team performance was evaluated during debriefing by: 1) a task completion checklist, and 2) simulated patient outcome. Scores for: 1) patient assessment and treatment, 2) organizing the response, and 3) communication were completed by consensus of the participants and instructors during debriefing. CRMGRS overall performance scores were collected by two expert raters when viewing videos of scenarios. Statistical analysis included association of CRMGRS overall performance score with CTT task checklist and comparison of CRMGRS overall performance score by CTT outcome.

Results: The Pearson Product Moment Correlation Coefficient between CTT checklist and CRMGRS overall performance score was 0.62 (p < 0.05). And the CRMGRS overall performance score was statistically different between CTT outcomes 1 (survival without critical incident) and 3 (death) (p < 0.05).

Conclusions/Discussion: Although the CTT checklist uses a more task focused evaluation of crisis team performance, it was found to be associated with the overall team performance score from the CRMGRS. In addition, scenario outcomes correlated with the CRMGRS scores. A task focused evaluation of CTT seems to correlate with the CRMGRS, and both may be helpful for formative and summative evaluation of team performance.

Poster Presentations

P1-1. Go Shadow: Viewing Care Through the Eyes of Patients and Families

- Pamela Greenhouse, PFCC Innovation Center of UPMC, Pittsburgh, PA, USA
- Lisa Schraeder, PFCC Innovation Center of UPMC, Pittsburgh, PA, USA
- Anthony DiGioia, III, UPMC, Pittsburgh, PA, USA
Submitted abstract:

**Background:** Traditionally, health care organizations have relied on after-the-fact information (e.g., survey data) to determine the “current state” of care delivery. However, dated information and data points are difficult to analyze and even more difficult to effectively act upon. Shadowing was developed as a tool to 1) view all care as experiences through the eyes of patients and families and 2) to identify the true current state of every segment of care over the full cycle of care. It is a unique and innovative component of inter-professional care redesign that provides an emotional connection between care providers, patients, and families, and creates an urgency (and pathway) to drive change.

**Objectives:** Shadowing as a means of:
1. identifying opportunities to improve care experiences for patients, families, and care providers
2. identifying care pathways for any clinical condition across the full continuum of care
3. identifying redundancies and inefficiencies in care processes
4. identifying the true cost of care at the level of the clinical condition
5. identifying and maximizing value (clinical and experiential outcomes ÷ cost) in health care
6. identifying inter-professional teams to close the gaps between current and ideal care experiences

**Methods:** Shadowing is the direct real-time observation of every segment of patient and family experiences in any health care setting using low to no-cost resources such as health care students, interns, and volunteers. Re-shadowing is used over time to create sustainability of the approach, as the current state is continually evolving.

**Results:** Shadowing (and re-shadowing) has been implemented in over 65 different clinical areas throughout UPMC as part of the Patient and Family Centered Care Methodology and Practice, and has involved nearly 2000 care providers, to date. Identification of the current and ideal states as defined by patients and families has allowed us to form inter-professional care teams to close the gaps between the two. Over 500 PFCC projects have been completed at UPMC since we developed Shadowing in 2006, and it is increasingly being used nationally and internationally.

We have also used Shadowing to: 1) create current state care pathways and identify the true cost of care for clinical conditions including Total Joint Replacement, Hysterectomy, and Day of Surgery, and 2) as a mechanism to identify opportunities to improve health and experience outcomes and decrease costs.

Shadowing has been described in peer-reviewed journals including Health Affairs, the Journal of Nursing Administration, and Clinical Orthopaedics and Related Research.

**Implications:** As health care reform continues to evolve, having a tool that motivates teams, breaks down silos within and between care settings, and shows exactly where improvement opportunities exist to improve outcomes, experiences and costs will be invaluable. Shadowing also provides the ability to create value and to do so in a way that allows care providers to succeed with new care delivery models and payment plans (e.g., bundled pricing). This one unique tool, shown to be a valid and effective through published outcomes, allows us to do all of this and at little or no cost.
P1-2. "Joining the Healing Community": Images and Narratives to Promote Interprofessional Professionalism

- **David Barnard**, Oregon Health & Science University, Portland, OR, USA

**Submitted abstract:**

**Background:** The Interprofessional Professionalism Collaborative has proposed the concept of "interprofessional professionalism," defined as "consistent demonstration of core values evidenced by professionals working together...to achieve optimal health and wellness in individuals and communities," to integrate professionalism, traditionally interpreted as a standard of conduct internal to each health profession, with the growing importance of interprofessional collaborative practice. To date, however, concepts and theoretical frameworks promoting interprofessionalism have had difficulty overcoming powerful forces of siloed professional education and identity formation. Cultivating interprofessional professionalism as an endpoint of health professions education remains quite challenging.

**Objective:** Professional identity does not form by concepts and theoretical frameworks alone. Compelling images and narratives that portray the sources and means of health promotion and healing also shape and motivate professional identity formation. This paper offers such a narrative, appropriate to the interprofessional context, and to the cultivation of interprofessional professionalism.

**Methods, Results, and Implications:** The paper draws on the literature of social support and health, the social determinants of health, and the “healthy communities” movement to portray health promotion and healing as social processes—the results of people’s embeddedness in supportive social structures and community—as an alternative to the dominant narratives in which health and healing appear to be products of technical prowess wielded by individual professional experts. In this alternative narrative, becoming a health professional is the act of “joining the healing community." Health professionals’ participation in the healing community (which extends beyond patient and professional to family, neighborhood, and society) rests on two intertwined elements of professional identity formation—excellence and mastery in one’s own chosen profession, and commitment to collaborative colleagueship with other professionals. These correspond to two dimensions of healing: the bonds between individual health professionals and their patients, and patients’ experiences of being surrounded and supported by a community of healers.

**Author Biographies**

David Barnard, PhD, JD, holds the Miles J. Edwards Chair in Professionalism and Comfort Care, and is Assistant Vice Provost for Interprofessional Education, at Oregon Health & Science University. He has taught and written about ethical and humanistic aspects of health care for 30 years. He was Professor of Medicine and Law at the University of Pittsburgh (1999-2012), and University Professor and Chair of the Department of Humanities at Penn State’s College of Medicine (1988-1999).

P1-3. Does TEAM STEPPS improve communication for DPT students during patient hand off in emergency situations?

- **Julie Ronnebaum**, Des Moines University, Des Moines, IA, USA

**Submitted abstract:**

**Background:** With the focus on healthcare reform and the need to decrease healthcare dollars spent, collaboration of healthcare providers is essential. Healthcare workers possess the common goal of
quality and patient safety but yet work independently. This type of atmosphere has promoted the formation of barriers to an effective functioning healthcare team. Each discipline has its own terminology, expectations, and idiosyncrasies relative to communication. Part of an effective healthcare team is to have good communication. Interprofessional education is necessary to help improve communication and break down the barriers such as stereotypes and lack of knowledge of scopes of practice. In emergency situations, communication is key to successful outcomes for the patients.

Objectives:
1. To assess if communication during hand offs improve with TEAM STEPPS?
2. Does a student’s perception of teamwork and role negotiation improve with Team STEPPS
3. Does interprofessional skills and care improve through contact with other healthcare providers?

Methods: An elective was developed to offer physical therapy students the opportunity to collaborate and communicate during patient hand offs with nursing students from an area community college. Case scenarios were executed with the use of simulators and standardized patients. The students filled out a pre and post survey on perception of team work and communication and were observed during team interactions while working with the simulated patient.

Result: The results will be completed by December 2013.

Anticipated Implications: Team STEPPS will improve team work and communication between physical therapy and nursing students in emergency situations that will carry over to improved practice.

P1-4. Interprofessional Education and Practice in Athletic Training

- Anthony Breitbach, Saint Louis University, St. Louis, MO, USA
- Russ Richardson, University of Montana Western, Dillon, MT, USA

Submitted abstract:
The Executive Committee for Education of the National Athletic Trainers’ Association authored “Future Directions in Athletic Training” with recommendations regarding the evolution of Athletic Training (AT). Interprofessional Education (IPE) and Practice (IPP) was included and a white paper was developed to guide the integration of IPE and IPP into AT.

Background: Professional preparation in athletic training (AT) has grown quickly from modest roots based in physical education in the 1960’s to its emergence as a recognized health profession today. The profession has long embraced interprofessional practice (IPP) but many times was not included in discussion of interprofessional education (IPE) at the institutional, governmental and international levels. As a result, the concept of IPE, which has been an emphasis in medicine, nursing and allied health since the 1990’s has not been a part of AT programs. Investigation into IPE/IPP in AT found that the concepts were misunderstood by AT educators where there was a lack of common language and appreciation for the role that it has in the future of health care.

Objectives: For IPE to become a required competency and/or accreditation standard in AT programs; and for athletic trainers to become valuable members of interprofessional teams positively contributing to improved patient/client outcomes.
Methods: In 2012, the Executive Committee for Education of the National Athletic Trainers’ Association authored “Future Directions in Athletic Training” which made recommendations regarding the evolution of AT. IPE was included and a strategy for formal inclusion of IPE into AT was developed. A primary part of this strategy was to develop a white paper regarding IPE/IPP in AT to inform the profession and other stakeholders on the background of IPE/IPP and model pedagogy that can be implemented in professional programs in AT.

Results: This white paper was developed using a structured process with an inclusive work group of authors from a wide range of settings.

Implications: A white paper on IPE/IPP in AT and the processes used to develop the document will be presented. Future plans for implementation of the white paper’s recommendations and support for IPE/IPP in AT will also be presented.

P1-5. Dissecting through barriers: Evaluating the effects of an interprofessional cadaveric dissection course

- Jenn Salfi, Brock University, St. Catharines, ON, Canada
- Bruce Wainman, McMaster University, Hamilton, ON, Canada
- Andrew Palombella, McMaster University, Hamilton, ON, Canada
- Alisha Fernandes, McMaster University, Hamilton, ON, Canada

Submitted abstract:

Background: In recognizing the sheer importance of interprofessional education (IPE), as well as the universal requirement and interest in anatomy across health professional programs, a ten week interprofessional cadaveric dissection course was initiated at McMaster University (2009). This redesign of the traditional anatomy course blends student-facilitated seminars and interprofessional problem-based discussions with hands-on team dissection, and serves as an opportunity for dissection-based exploration of the human body in a manner that facilitates interprofessionalism, teamwork, and collaboration.

Objectives: Since its inception nearly five years ago, approximately 140 students from a variety of health science programs have completed the course, with half participating in an explanatory sequential mixed method study (n=71). The purpose of the study was to evaluate the effectiveness of this interprofessional course in changing attitudes and perceptions regarding interprofessional collaboration, and increasing knowledge and appreciation for not only anatomy, but also other health professionals’ roles.

Methods: Quantitative data collected before and after the course assessed for changes in attitudes and perceptions regarding interprofessional collaborative practice, and students’ readiness for interprofessional collaboration. Qualitative data were collected from multiple sources including weekly participant feedback, and focus groups with participants and student facilitators.

Results: Quantitative findings revealed significant improvements in Positive Professional Identity and in Competency & Autonomy subscales, which was reinforced by the qualitative findings that highlighted themes of role articulation and clarification. New themes that emerged from this mastery level IPE event were building relationships and trust in others’ roles, peer mentoring, and hidden curriculum.
Implications: Positive team behaviours are more likely to be reinforced when an IPE experience is of longer duration, and with a number of different pre-licensure student groups. Findings from this study were somewhat different from previous research on short-term IPE events, which calls for the future development (and evaluation) of similar innovative, long-term IPE initiatives.

Author Biographies
Jenn Salfi, RN PhD, is currently Assistant Professor with the Department of Nursing, Brock University. Jenn spearheaded the development and implementation of an IPE framework across four levels of a multi-site, BScN curriculum. In 2012, Jenn received the Award for Excellence in Nursing Education (CASN), the Dr. John Gilbert Interprofessional Education Mentorship Award (NaHSSA); and the Alan Blizzard Award for Collaboration in Teaching (SoTLHE).

Bruce Wainman, PhD, is the Director of the Education Program at McMaster, as well as the Director of the McMaster Surgical Skills Center, Biological Sciences Co-ordinator for the Ontario Midwifery Consortium, and Associate Professor of Pathology and Molecular Medicine. Bruce has recently published on the role of anatomy in interprofessional education, as well as the efficacy of various learning modalities on acquiring anatomy knowledge.

P1-6. Interprofessional education (IPE) for students who aim to become medical care providers in Japan

- Tomoko Hayashi, Mie University, Tsu, Mie, Japan
- Imura Kazumi, Mie University, Tsu, Mie, Japan

Submitted abstract:
Interprofessional education (IPE) has been promoted to enable students who aim to enter different medical occupations to study together and learn from each other. This study aimed to clarify, through the examination of documents, the present situation concerning IPE provided for students before they acquire qualifications, what the students learn from the education, and future tasks.

We searched the Igaku Chuo Zasshi medical-literature database using the keywords "tashokushu renkei kyouiku" (interprofessional education) and "gakusei" (students) to identify the documents to analyze. We then read the documents' abstracts and extracted 14 documents focusing on interprofessional education for analysis.

As a result of our analysis, we observed that IPE is being provided through methods such as case studies, interviews of simulated patients, and practical training in multi-disciplinary teams comprised of students learning different fields of study, such as nursing, medical science, and pharmacy. Through IPE and experiencing teamwork, the students learned the difference of roles according to the type of occupation as well as the differences in the way each type of staff member gathers information in the workplace and approaches patients. By tackling issues through teamwork, the students learned the difficulties in communicating with staff members of other occupations and the possibility of achieving patient-centered care through interprofessional work, and thus began to identify situations requiring interprofessional work. On the other hand, we observed that the students did not learn specific measures to promote interprofessional work, and so it is still necessary to examine educational methods to achieve this.
P1-7. Lessons from Japan: The Importance of Culture and Work Ethics in Promoting Interprofessional Education and Collaborative Practice

- Lhuri Dwianti Rahmartani, Universitas Indonesia, Indonesian Young Health Professionals’ Society (IYHPS), Jakarta, Indonesia
- Samuel Josafat Olam, Indonesian Young Health Professionals’ Society (IYHPS), Jakarta, Indonesia

Submitted abstract:
According to the WHO, the implementation of Interprofessional Education and Collaborative Practice (IPE-CP) is one of the solutions to strengthen health system. While this could be a chosen strategy for Indonesia, IPE-CP remains a new concept in the country. Consequently, it takes a lot of learning and adaptation from the existing models, particularly from countries that have applied IPE-CP as part of their health professional education curriculum.

We present here our personal experience from IPE training course in Gunma University, Japan, on August 20th-26th, 2013. The course composed of lectures, group discussion, case simulation, and field visit to the university hospital and geriatric health services facility.

We learned that, although well-established curriculum, good hospital management system, and advanced technology played vital role in supporting the IPE-CP implementation, culture and work ethics also boosted the performance of IPE-CP. We observed two major characteristics of the health staffs: Japanese culture on high attention to details and strong commitment to work.

Patients were cared in a very thoughtfully detailed way to ensure their safety and convenience. There were clear role distribution, staffs interdependency, and commitment to own responsibilities. For example, drug administration were multi-checked by physicians, pharmacists, and nurses. Meals were adjusted carefully to patients’ condition based on doctors’ instruction and nutritionists’ consultation. Non-medical services were also part of the teamwork in enhancing quality of life up to “almost-the-unseen” level; they provided entertainment in chemotherapy ward and accessories including artificial hair and eyebrows for cancer patients.

The experience showed us the connection between these words: commit, care, and collaborate. Strong commitment to work combined with holistic care for the patients will eventually lead to an effective collaboration. In addition to formal IPE-CP curricula, we hope that those non-measurable qualities are well-learned by all health professional students in Indonesia.

P1-8. A Model for Success: Using the Nominal Group Process to assess, plan and evaluate an IPE program

- Julie Sanford, James Madison University, Harrisonburg, VA, USA
- Emily Akerson, James Madison University, Harrisonburg, VA, USA
- Cynthia O'Donoghue, James Madison University, Harrisonburg, VA, USA
- Anne Steward, James Madison University, Harrisonburg, VA, USA

Submitted abstract:
Background: Interprofessional collaborative practice (IPCP) occurs when multiple health care workers from different professional backgrounds work together with patients and families to deliver the highest quality of care. The World Health Organization (2010) suggests that “when students from two or more professions learn about, from, and with each other,” they can “enable effective collaboration and
improve health outcomes.” The goal of interprofessional collaboration and education (IPE) is to encourage increased knowledge of the roles and responsibilities of other disciplines and to improve communication and collaboration among disciplines. Learning to work in interdisciplinary teams has been identified as a core competency for all health professionals by the Institute of Medicine (IOM, 2003).

**Objectives:** As a result of participating in this discussion, participants will:
- Identify 3 strategies that engage faculty in planning a model for successful implementation of IPE and IPCP.
- Demonstrate the use of the nominal group process as a strategy to engage faculty in planning for implementation of IPE and IPCP.
- Identify 3 examples of IPE/IPCP faculty innovations and the processes that facilitate innovation.
- Develop a plan for implementing IPE/IPCP strategies.

**Methods:** The IPE Task Force examined the state of IPE in the College. The faculty’s knowledge, experience, and opinions of IPE were assessed using a variety of methods. The data collection activities, procedures, and formats were diverse and afforded participants opportunities to contribute through dyadic interviews, group discussions, electronic input, and a nominal group process.

A SWOT analysis was conducted incorporating information from department heads, program directors, and faculty; literature review; preliminary findings from the IPE Task Force Survey; results from the IPE Institute conference; and discussions of the IPE Task Force. The SWOT analysis was used to highlight the strengths, weaknesses, opportunities and threats present within the academic community to build a sustainable IPE program.

**Results:** The SWOT analysis revealed significant strengths and opportunities. Two critical strengths were identified, namely a commitment to IPE by institutional leaders and an infrastructure that could support IPE initiatives. Weaknesses included training, experience and professional development of faculty in IPE, crowded curricula impeding IPE activities, recognition of IPE activities in faculty workloads, promotion and tenure, and tight financial resources within the College. Threats included a low level of interest among some faculty, competing time demands on faculty activities, and the natural tendency of programs and disciplines to remain within their academic silos.

**Implications:** The IPE Taskforce concluded with five recommendations: establish a visible institutional home for IPE; create a dedicated leadership structure with support staff and resources; create mechanisms for faculty development and engagement; review new courses for potential in IPE professional and pre-professional activities; support interprofessional collaboration in teaching, research, and clinical practice for faculty and students, and study abroad opportunities with an IPE focus.

**P1-9. An Interprofessional Approach to Medication Error Reduction in the Intensive Care Unit.**
- **David Robertshaw,** University of Derby/Sherwood Forest Hospitals NHS Foundation Trust, Derby, United Kingdom
- **Tom Bell,** Sherwood Forest Hospitals NHS Foundation Trust, Sutton in Ashfield, Nottinghamshire, UK
Charlotte Beresford, Sherwood Forest Hospitals NHS Foundation Trust, Sutton in Ashfield, Nottinghamshire, UK

Submitted abstract:
Background: Medication errors are common in the intensive care unit, occurring at a rate of 106 per 1000 patient ICU days (Kane-Gill and Weber 2006). They occur in 6% of all hospital medication use episodes (Krahenbuhl-Melcher et al 2007), and 19% of medication errors are life threatening. 42% of these are of sufficient important to require additional life-sustaining treatments (Tissot et al 1999). 53% of all errors occur during the administration stage, followed by prescription (17%), preparation (14%) and transcription (11%) (Krahenbuhl-Melcher et al 2007). Interruptions are common and contribute to medication errors, with each nurse averaging thirty interruptions per shift (Potter et al 2005). Medication errors were highlighted as a key issue by the Keogh report (Keogh et al 2013). The intensive care unit service improvement group (itself adopting an interprofessional approach with nurses, doctors, a pharmacist and a physiotherapist) convened an interprofessional team to target strategies across the professional groups to reduce medication errors.

Objective: To reduce medication errors using an interprofessional approach and interruption prevention strategies, improving patient safety and reducing harm.

Methods
- An interprofessional group was formed to oversee the service improvement process.
- A project team consisting of two nurses and a pharmacist were identified to lead the project.
- Surveillance was conducted of three nurses during a 12-hour night shift.
- A questionnaire involving all staff groups was conducted.
- During November 2013 small-scale pilots will be conducted of prevention strategies including bibs, floor zones, and buddy systems.

Results
- Running awareness campaigns alone encouraged all staff groups to discuss medication safety with one another.
- Interruptions occurred mostly at 22:00 and 06:00, with 36 interruptions in total (an average of three per nurse per hour).
- The questionnaire showed significant resistance amongst all staff to interruption prevention strategies.
- Significant deficiencies were identified in prescribing, checking, preparation and administration of medication.
- These deficiencies were across all staff groups, and all levels.
- Results are yet to be seen as the project continues throughout November.
- Working as an interprofessional team greatly enhanced the service improvement process and will contribute towards the project’s success.

Implications: Working as an interprofessional team both at service improvement group and project group level has added value and diversity that would otherwise not be present in a uni-professional group. Interprofessional working has built stronger links between professions in our unit. It is clear that medication errors are present across all staff groups and by working together to reduce these errors, patients will experience significantly less harm and a reduction could potentially be seen in mortality.
P1-10. The Interprofessional Master: what should interprofessional education look like at Masters level?

- **David Robertshaw**, University of Derby/Sherwood Forest Hospitals NHS Foundation Trust, Derby, United Kingdom
- **Yvonne Denby**, University of Derby, Derby, United Kingdom

Submitted abstract:
**Background**: Interprofessional education (IPE) is defined as occurring when two or more professionals learn with, from and about each other to improve collaboration and the quality of care (CAIPE, 2002). The WHO (2010), GMC (2009), NMC (2008) and HCPC have embedded interprofessional approaches into their literature and codes of conduct as a direct result of deficiencies in collaborative care highlighted in a number of recent cases. This poster proposes an interprofessional Masters-level digital learning module housed within the University of Derby Online Learning (UDOL) aimed at all healthcare professionals to develop their interprofessional skills and give them the toolkit to address interprofessional learning (IPL) as educators. Historically, provision of healthcare modules within UDOL have been aimed mostly at nurses, but the development of a new MSc has adopted an interprofessional approach. This poster presents a clinical approach to an IPE module at Masters level.

**Objectives**
- This poster highlights the important features a Masters level interprofessional qualification should consider and include.
- The end product is creation of an interprofessional education, learning and practice module at the University of Derby Online Learning.

**Methods**
- A presentation of the key interprofessional attributes and skills required at Masters level will be conducted, represented by diagram in the final poster.
- Healthcare professional roles, module content and learning outcomes will be mapped against the Capability Framework(CUILU 2004) and methods of sharing these with students and how these skills fit within the module will be shared in the poster.
- An outline of the module will be prepared and built using diverse enhanced learning objects, some of which can be demonstrated and shared at the conference.
- Opportunities for interaction and collaboration will be provided around initial scenarios (similar to those found at undergraduate level study) and then discussed from an educator and facilitator perspective, examples of these will be shared in the poster.

**Results**: The module aims to enhance patient care by creating highly qualified dynamic collaborative healthcare professionals who become leaders in their field. The module also aims to give practitioners the toolkit to facilitate interprofessional learning and go on to produce stimulating educational content.

**Implications**: This poster highlights the core components of a Masters level module in interprofessional learning and education which might drive forward higher level study in an interprofessional context. Additionally, the poster allows other institutions and academics to gain ideas and stimulates a conversation around producing not only an interprofessional workforce, but a workforce that can also facilitate interprofessional working and collaboration.
P1-11. Online patient safety module for first-year physical therapy and third-year pharmacy students

- **Amber King**, Thomas Jefferson University, Jefferson School of Pharmacy, Philadelphia, PA, USA
- **Marcia Levinson**, Thomas Jefferson University, School of Health Professions, Philadelphia, PA, USA

Submitted abstract:

**Background:** The number of medical errors remains unacceptably high according to reports from the Institute of Medicine and Health Grade Reports. Evidence suggests that working in a culture of collaborative teams can prevent errors and improve patient outcomes. First-year physical therapy and third-year pharmacy students enrolled in two separate courses worked and learned together in one interprofessional module on patient safety delivered in an online, asynchronous format.

**Objectives:** The audience will understand how two courses from two separate programs were combined for a module on patient safety for the purpose of promoting interprofessional collaboration and learning. The students analyzed various aspects of a medical error.

**Methods:** This online module, presented as a wiki, centered around a video describing an actual medical error, PowerPoint® presentations, discussion boards, and a group project. The presentations covered the culture of the healthcare team, communication, conflict management, root cause analysis (RCA), error disclosure, and post-RCA support for the healthcare team members. Students participated in discussion boards, commenting on the case or sharing personal experiences and were required to include a primary literature reference or news story related to medical errors. Interprofessional student groups performed a root cause analysis using the fish-bone model. Students were evaluated based on their contributions to the discussion board and root cause analysis group project.

**Results:** All students participated and interacted interprofessionally on the discussion boards and root cause analysis project. Student views of the module were varied and further detail will be assessed at the end of the semester.

**Implications:** Accreditation standards and healthcare trends make interprofessional training at the student level imperative. This endeavor provides a framework for combining curricula in a collaborative model. Future plans include involving other professions, creating additional modules, and a potential for electronic tablet delivery.

P1-12. Improving interprofessional learning experiences for large groups of students: A student-centered approach

- **Elizabeth Blake**, South Carolina College of Pharmacy, USC Campus, Columbia, SC, USA
- **Beverly Baliko**, University of South Carolina, College of Nursing, Columbia, SC, USA
- **Vera Polyakova-Norwood**, University of South Carolina, College of Nursing, Columbia, SC, USA
- **Joshua Thornhill**, University of South Carolina, College of Medicine, Columbia, SC, USA

Submitted abstract:

**Background:** Interprofessional education (IPE) and collaborative practice are vital for quality healthcare and health-system improvement. Incorporation of IPE into the required curricula for health professional students aims to meet the core competencies of the Interprofessional Education Collaborative (IPEC) to better prepare students for team-based practice. Health professional faculty members at a large
university implemented a pilot introductory interprofessional course in 2012 for first-year students in pharmacy and medicine. Students were assigned to small interprofessional teams and were required to complete four online modules with asynchronous discussions. Three on-site meetings throughout the semester allowed for face-to-face discussions of healthcare issues. In 2013, the course was expanded to include students in nursing, social work, and public health, with the overall enrollment surpassing 400 students.

**Methods:** Spring 2013 students were requested to complete a 13-item course assessment tool. They were asked to comment on strengths and weaknesses of the course and make suggestions for improvement. Course coordinators analyzed the data and determined a plan for course improvement.

**Results:** Two hundred fifty students completed the evaluation tool (57.8% response rate). The majority of respondents indicated an improvement in knowledge regarding various aspects of health care (54.4-66.3%). Respondents demonstrated an increased appreciation for interprofessional collaboration (63.7%) and agreement that they enjoyed learning with other health professional students (69.6%). Unfortunately, only a third of respondents perceived the activity as worthwhile for their professional development (32.4%). Comments from students indicated a desire for more focused small group activities during on-site meetings with less focus on online discussions. Respondents specifically requested more time for interaction with other health professional students to refine team skills and to explore similarities and differences in the roles and responsibilities of each profession in greater depth.

Based on the student feedback, course coordinators redesigned the course for the spring 2014 delivery. The new version of the course replaces online discussions with automated knowledge assessments and expands small group activities during the on-site meetings. Similar course evaluation instruments will be used to gauge students’ skills development and satisfaction with learning. The new data will be used for further course revision. **Implications:** The quality of interprofessional learning experiences is likely to affect students’ teamwork skills development and willingness to engage in interprofessional practice in the future. It is imperative to implement a systematic approach to improving the quality of interprofessional learning experiences. Student feedback must be placed at the center of this process.

The objectives for this presentation are to discuss benefits and challenges of creating an introductory interprofessional course to promote teamwork and communication skills across health professions, to review course assessments regarding attitudes and learning experiences, and to describe the quality improvement process utilized to refine the course content and format to meet student needs and IPEC competencies.

**Author Biographies**

Elizabeth W. Blake earned her PharmD at the Medical University of South Carolina then completed 2 pharmacy residencies with focused training in Family Medicine. She joined the faculty at the SC College of Pharmacy on the USC Campus in 2006 where she has been involved in developing and expanding interprofessional experiences since 2009 and currently serves as co-director for the university interprofessional group. She recently completed the Academic Leadership Fellows Program through AACP.

Beverly Baliko earned her PhD in Nursing at Virginia Commonwealth University. She has 12 years of experience in nursing education and has been teaching graduate and undergraduate courses at the University of South Carolina since 2006. She joined the USC interprofessional group in 2012. In addition
to co-coordinating the introductory interprofessional course for health professionals, she is a member of an interdisciplinary team that was recently awarded a SAMHSA training grant.

Vera Polyakova-Norwood has more than twenty years of experience in designing, teaching and managing various types of distance education courses and programs. As director of online learning at the University of South Carolina’s College of Nursing, she assists faculty with design, development, implementation and evaluation of online courses, modules and activities. She presented at several local, national and international conferences and led numerous workshops on technology-based teaching and learning.

Joshua T. Thornhill, IV earned his MD from Eastern Virginia Medical School and he completed his general psychiatry residency at the William S. Hall Psychiatric Institute. A diplomate of the American Board of Psychiatry and Neurology, he serves as the Associate Dean for Medical Education and Academic Affairs at the University of South Carolina School of Medicine.

Teri Browne earned her MSW at the State University of New York at Buffalo and her PhD at the University of Chicago, and is an Associate Professor at the University of South Carolina. She is the co-editor of the Handbook of Health Social Work (1st and 2nd editions) and past national chairperson of the Council of Nephrology Social Workers. Dr. Browne worked as a licensed nephrology social worker for 13 years across the country.


- **Alison Greig**, University of British Columbia, Vancouver, BC, Canada
- **Diana Dawes**, University of British Columbia, Vancouver, BC, Canada
- **Beth Bates**, University of British Columbia, Vancouver, BC, Canada
- **Sharaya Friesen**, University of British Columbia, Vancouver, BC, Canada

**Submitted abstract:**

**Background:** Effective Interprofessional health care involves a collaborative, team-based approach to gain optimal patient outcomes. Ideally, health professional students learn team-based collaboration skills during their training, but many programs are challenged to find opportunities during their respective programs when schedules overlap and create Interprofessional learning opportunities. Virtual Patient cases are an interactive approach to educate students about collaboration: these electronic cases provide flexibility in delivery including a mixture of online and face-to-face learning; group and individual learning; and synchronous and asynchronous activity.

**Objectives:** To adapt the existing ©W(e) Learn educational framework for the development of an Interprofessional Virtual Patient case, and to test this framework with the creation of an Interprofessional case.

**Methods:** An educational framework for Virtual Patient case construction was adapted to facilitate Interprofessional case development. This adapted framework was tested by two Physical Therapy students and a Family Physician who worked collaboratively to author a case that was based on an Interprofessional clinical scenario. The storyboard for the case was developed through the Visual Understanding Environment program. An e-Learning Developer created the electronic case from the storyboard and media (e.g. photographs, x-rays, etc.).
**Results:** The adapted framework enabled the development of a Virtual Patient case that focuses on eight Interprofessional collaboration learning objectives, and five discipline-specific learning objectives. The complete case consists of two modules, thereby dividing the case into manageable learning interactions. A panel of experts in Interprofessional education and clinical practice reviewed the storyboards and changes to case content were made iteratively. Module one has been programmed into an electronic version.

**Implications:** The educational framework provided a successful foundation to develop an Interprofessional Virtual Patient case. Cases that teach Interprofessional collaboration as well as discipline-specific content can be authored and edited by an Interprofessional team.

**P1-14. Teamwork Competence... As Important as Our Clinical Competence**

- Lindsey Eberman, Indiana State University, Terre Haute, IN, USA
- Leamor Kahanov, Indiana State University, Terre Haute, IN, USA
- Kenneth Games, Indiana State University, Terre Haute, IN, USA

Submitted abstract:
The role of teamwork in the delivery of health care embraces the Core Competencies of Interprofessional Education. Yet, achieving successful team dynamics is both difficult to cultivate and assess. We often spend more time instructing the foundational aspects of psychomotor procedures, and minimal time teaching the fundamentals of teamwork, but expecting the behaviors to occur during simulation or real-time.

The purpose of this featured presentation is to provide attendees with a teamwork curriculum, based on the principles of learning over time. We aim to provide attendees with lessons and evaluation techniques for the retrieval, comprehension, analysis, and utilization of teamwork knowledge and skills.

Teamwork activities we will discuss include, but are not limited to the following:

a. Using Team Based Learning to teach Team Based Learning. Student teams engage in cognitive knowledge about characteristics of teamwork while concurrently utilizing team skills. Third year professional students used research articles to create a concept map to link teamwork and the core values of interprofessional care.

b. Amazing Race: Undergraduate (second and fourth year) and graduate professional students (first semester) are assigned to find various campus locations based on clues. The mix of both educational levels and disciplines creates a “flipped” dynamic where undergraduate students serve as a resource for the graduate students, because they often know more about the campus and can share within the group.

c. Lego Bridge: Teams of five students work to build a Lego Bridge. Teams of two are placed on either end of the table and a divider is placed in the center. One student will serve as the “guide,” the only individual allowed to see both sides of the bridge. The groups build two ends of the bridge without seeing the other side, while the “guide” helps to provide communication resulting in two compatible ends of a bridge.

d. Identities: Graduate students, both professional and post-professional, engage in small groups to discuss characteristics that define them. At the onset, student write a 1-2 sentence biography, and then answer a series of questions about favorite color, food, animal, movie, etc. In small interprofessional groups, the students use the questions to get to know one another.
Students then rewrite the biography referring to nothing professional. A facilitator will bring the small groups together to talk about things they learned about one another. The objective of the activity is to help student break down professional identity barriers and learn that their shared values (often about helping people) is what should drive their team interaction.

e. Patient Care: In an emergent care situation, professional and post-professional students engage in the care of a simulated patient. Students are provided with little context and expected to act immediately upon observing the patient in distress. Teams self-evaluate and reflect using a Group Skills Assessment tool.

These teamwork activities demonstrate a few examples of a comprehensive teamwork curricula intended to provide students with foundational knowledge of teamwork prior to implementation and utilization of these skills.

P1-15. Interprofessional Admissions Approach Using Team Dynamics Evaluation

- Lindsey Eberman, Indiana State University, Terre Haute, IN, USA
- Leamor Kahanov, Indiana State University, Terre Haute, IN, USA
- Amber Young, Indiana State University, Terre Haute, IN, USA
- Kenneth Games, Indiana State University, Terre Haute, IN, USA

Submitted abstract:
Readiness for interprofessional education (IPE) is a requisite for students seeking professional education in healthcare. Determining factors for interprofessional education readiness include characteristics of individuals able to manage teamwork. To assess IPE readiness in an Athletic Training program we assess teamwork as a component of the admissions process. We engage candidates (typically 18-19 year old second semester freshman and a small population of transfer or non-traditional students) in an interprofessional team dynamic evaluation. To engage potential students, we used five primary activities: 1) building the tallest Lego® tower, 2) building and modifying a Lincoln Log® structure, 3) building a Lego® bridge with visual limitations, 4) building a Jenga® tower, and 5) bouncing balls into a basket with various limitations. We evaluated students with a teamwork rubric with 4-point scales measuring contribution, problem solving, attitude, focus on the task, and the ability to work with others. Evaluators included graduate students and faculty in Athletic Training, faculty in Physician Assistant Studies, Occupational Therapy, and Physical Therapy. We identified that even though some students were diligent academically, they often did not perform well as communicators and collaborators. Further, leaders failed to emerge in teamwork activities, but consensus was achieved. In some tasks, we allowed students a period for planning, but they often failed to use it, and quickly jumped into the activity without preparation or delegation of responsibilities. In one instance, students failed to speak with one another throughout the entire 20 minute activity. We have used this activity, as an alternative to interviews, for the past two years. The activity has yielded more insight into the viability of students as team-based practitioners than the traditional interview approach. Further, the use of interprofessional evaluators has provided various discipline perspectives about student viability and likelihood of success.

P1-16. Interprofessional Communication: A Comparative Teaching Strategy for Pharmacy Students

- Hollis Day, University of Pittsburgh, School of Medicine, Pittsburgh, PA, USA
- Susan Meyer, University of Pittsburgh, School of Pharmacy, Pittsburgh, PA, USA

Submitted abstract:
**Background:** Interprofessional communication is a critical element to patient care. Impaired communication adversely affects patient care yet is often a difficult topic for students to broach.

**Objective:** This study compared two methods of teaching pharmacy students how to communicate with physicians in challenging scenarios: standardized colleagues (adaptation of standardized patients) and video triggers/group discussions.

**Methods:** Fifty-seven (57) second-year pharmacy students interacted with medical faculty as standardized colleagues (SC) portraying particular professional roles, attitudes, and communication styles. Pharmacy facilitators and SCs provided feedback on demonstrated behaviors impacting communication effectiveness. Forty-seven (47) students viewed videos demonstrating interprofessional interactions and participated in facilitated discussions of the demonstrated interprofessional communication skills. A self-evaluation of comfort and confidence in communication skills adapted from a validated instrument1 was administered at baseline, three, and six months. Students completed an evaluation of the perceived helpfulness of the activity. Data from students with scores on all three time points were used in the analysis (n=92) using paired samples t-tests. An independent samples t-test was performed to determine differences in mean scores for the activities.

**Results:** Results of the repeated measures ANOVA demonstrated an increase in comfort and confidence over time (F=42.508, p<.001). Paired samples t-tests showed a significant increase between baseline and three months (t =-7.615, p<.001). An independent samples t-test revealed a significant difference in helpfulness, confidence, and comfort between the video and standardized colleagues methods (t=-2.396, p=.019).

**Implications:** Using standardized colleagues is another methodology that can be employed to enhance students’ abilities to communicate effectively in challenging situations.


**Author Biographies**
Hollis D. Day, MD, MS, FACP is an Associate Professor of Medicine and practices in a patient-centered medical home as a general internist and geriatrician. She is the Director of the Advanced Clinical Education Center for performance-based assessment at the University of Pittsburgh School of Medicine, is an Advisory Dean and is a member of the University’s Working Group on Interprofessional Education.

Susan M. Meyer, PhD, is associate dean for education and professor at the University of Pittsburgh School of Pharmacy and chairs the University of Pittsburgh’s Working Group on Interprofessional Education. She served as a member of the expert panel that authored the IPEC Core Competencies document and currently serves as chair of the American Interprofessional Health Collaborative.

**P1-17. Tools to Assess Team Performance in Practice: Implications for Education**
- **Hollis Day,** University of Pittsburgh, School of Medicine, Pittsburgh, PA, USA
- **Susan Meyer,** University of Pittsburgh, School of Pharmacy, Pittsburgh, PA, USA

Submitted abstract:
**Background:** Four domains for effective practice were outlined in the Interprofessional Education Collaborative’s “Core Competencies for Interprofessional Collaborative Practice:” values/ethics, roles/responsibilities, communication, and teams/teambwork. Most health professions have interprofessional competencies as expectations in their accreditation standards. There is a need to evaluate a learner’s ability to work and communicate effectively in teams. To date, few validated tools for assessment of interprofessional competency attainment have been identified.

**Objectives:** 1) Identify tools used in patient care to assess the performance of teams, and 2) propose how might these tools be translated into the medical education environment.

**Methods:** A critical synthesis review of the literature was conducted using the words teamwork, team dynamics, and assessment to identify research that measured performance of teams of two or more healthcare providers, including a physician and at least one other health professional. Alignment with the team and teamwork competencies outlined in the Core Competencies was evaluated. Specific focus was on how team behaviors were assessed and how these practice models might be translated to the educational environment. Included articles reported measures of reliability and validity. While the search was international in scope, only articles published in English were reviewed. Conference abstracts were excluded, as were articles that focused on patient care outcomes.

**Results:** Approximately fifty articles met inclusion criteria. The tools described were mapped to the teams/teambwork domain and organized according to the eleven team/teambwork competencies. Certain competencies were underrepresented in team assessment tools.

**Implications:** Additional study and further development of related evaluative tools and curriculum to apply to healthcare educational settings and to assess learner development of competencies for interprofessional teamwork is needed. This work can be applied across all health professions education programs to meet an ongoing need for valid and reliable measures of competencies in interprofessional teamwork.

**Author Biographies**

Hollis D. Day, MD, MS, is an Associate Professor of Medicine and practices in a patient-centered medical home as a general internist and geriatrician. She is the Director of the Advanced Clinical Education Center for performance-based assessment at the University of Pittsburgh School of Medicine, is an Advisory Dean and is a member of the University’s Working Group on Interprofessional Education.

Susan M. Meyer, PhD, is associate dean for education and professor at the University of Pittsburgh School of Pharmacy and chairs the University of Pittsburgh’s Working Group on Interprofessional Education. She served as a member of the expert panel that authored the IPEC Core Competencies document and currently serves as chair of the American Interprofessional Health Collaborative.

**P1-18. Changes in attitudes toward health care teams through the IPE training course**

- **Yoshiharu Tokita,** Gunma University, Graduate School of Health Sciences, Maebashi, Gunma, Japan
- **Shiomi Kanaizumi,** Gunma University, Graduate School of Health Sciences, Maebashi, Gunma, Japan
- **Fusae Tozato,** Gunma University, Graduate School of Health Sciences, Maebashi, Gunma, Japan
• Hideomi Watanabe, Gunma University, Graduate School of Health Sciences, Maebashi, Gunma, Japan

Submitted abstract:
Background: The WHO Collaborating Centre for Research and Training on International Education, Gunma University, held the first ever “Interprofessional Education (IPE) Training Course” in Gunma University. This program was to provide technical information and a model for the establishment or development of IPE program. Targeted participants were educators or health professionals with interests in the introduction of IPE curricula to their educational/health care institutions, particularly in the Western Pacific Region.

Objectives: This study was to analyze the changes in attitudes toward health care teams through the IPE training course.

Method: This course was a one-week course held in August 2013 at Gunma University Graduate School of Health Sciences. All of the sessions were expected to fulfill the main objective of providing technical information and a model for the establishment or development of IPE program. This year’s participants came from the Philippines and Indonesia. The trainees’ team consisted of one occupational therapist (OT), one physical therapist (PT), and two medical doctors (MD). The attitude toward interprofessional health care teams were evaluated prior to and after the training course using the modified Attitudes Toward Health Care Teams Scale (mATHCTS) adapted by Curran et al. (2007), a 5-point Likert scale rating from one (strongly disagree) to five (strongly agree).

Results: The almost mean score of participants after completing the training course measured by the mATHCTS trended to higher than that of before, e.g. the mean score changed from 4.00 to 4.75 in the question “Working in an interprofessional environment keeps most health professionals enthusiastic and interested in their jobs”.

Implications: Our findings suggest that the IPE training course in Gunma University may play an important role in fostering attitudes toward health care teams.

P1-19. An Interprofessional Approach to Patient Care
• Martha Sexton, University of Toledo, Toledo, OH, USA
• Diane Cappelletty, University of Toledo, Toledo, OH, USA
• Michelle Masterson, University of Toledo, Toledo, OH, USA
• Craig Black, University of Toledo, Toledo, OH, USA

Submitted abstract:
Background: Explosive changes are occurring in healthcare today and a swift shift to a team-based care model is essential. This shift is not possible unless healthcare students are taught how to work as part of interprofessional healthcare teams. Unfortunately, most students are taught among their own disciplines with little to no contact with students from other healthcare professions. However, after graduation most are immersed in challenging patient care situations and expected to work as an effective team member. Therefore, the status quo of teaching students in silos is no longer justifiable and academe must start making changes now.

Objectives: Participants should be able to:
• Discuss institutional approaches to interprofessional education
• Identify barriers/challenges
• Describe short and long-term strategies
• Describe potential incentives or resources

Methods/Description: An interprofessional, case-based, experiential course was offered at the University of Toledo. Faculty and students from eight healthcare disciplines (Medicine, Nursing, Occupational Therapy, Pharmacy, Physician Assistant, Physical Therapy, Respiratory Care, and Social Work) participated. Course objectives included the following: foster an understanding of the impact of “team” on patient care; discuss the roles/scope of practice of different professions; identify the importance of interprofessional communication; describe the dynamics of effective teams; and recognize the socio-economic aspects of healthcare. Course strategies included: case-based scenarios; standardized patients; interprofessional simulations; TeamSTEPPS training; and participation in an interprofessional community care clinic. Challenges experienced included scheduling, different curricular structures, levels of clinical knowledge, and resources.

Results: Students completed a course evaluation using a 1-5 scale (strongly disagree to strongly agree) specifically assessing the course objectives stated above (roles/scope of practice, impact of ‘team’, attributes of different trainees, communication skills, and characteristics of effective teams). Open-ended comments were also solicited. In addition, two attitude surveys were administered for pre/post comparisons regarding attitudes toward other professions and toward teamwork. Data will be analyzed upon course completion.

Implications: Comprehensive, creative, and feasible approaches are needed to meet accreditation standards which require that IPE be evident across healthcare curriculums. In order to meet these mandates, healthcare educators need to know how to create and implement interprofessional experiences for large numbers of students. The knowledge and experience gained by offering this interprofessional experiential course will likely be useful to academicians attempting to devise interprofessional initiatives.

Author Biographies
Craig Black, PhD, RRT-NPS, FAARC: Dr. Black is director of Respiratory Care Education at the University of Toledo. This program emphasizes interprofessional collaboration between Respiratory Care students and other health professionals, both through practice at clinical sites and exercises with students from medicine, nursing, and pharmacy held in the university’s high-fidelity simulation center. He also teaches aspects of respiratory care in Nursing, Physician Assistant, Physical Therapy, Athletic Training, and Organ Donation Science Programs.

Michelle Masterson, PT, PhD is Chair of the academic department that includes programs in physical and occupational therapy and speech language pathology. Her interprofessional experiences include co-director of the Parkinson’s Disease Interdisciplinary Clinic at the University of Toledo Medical Center, recipient of the University’s Interprofessional Student Research Award for which she served on interprofessional teams of student researchers and faculty mentors, and faculty mentor for the elective program on "An Interprofessional Approach to Patient Care".

Sheri Gentry MPAS, PA-C is an Assistant Professor and Faculty Clinical Coordinator in the Department of Physician Assistant Studies at the University Of Toledo College Of Medicine since 2009. She earned a Bachelor of Arts from Lake Erie College/Cleveland Clinic Foundation Physician Assistant Program in 1983,
and Masters of Physician Assistant Studies from the University of Nebraska Medical Center, College of Medicine in 2005. She has served clinically in a wide range of specialties.

Diane Cappelletty, PharmD is an Associate Professor of Pharmacy Practice and Chair of the curriculum committee for the College of Pharmacy and Pharmaceutical Sciences. She earned her Bachelor of Science in Pharmacy and PharmD degrees from The Ohio State University. Her research and practice are in infectious diseases with additional research interest in active learning and simulation in pharmacy curricula. She has been involved with interprofessional education through medical missions to Honduras, Tanzania and Peru.

Martha Sexton PhD (c), RN, CNS is the Director of the Learning Resource Center and Interprofessional Simulation at the University of Toledo in the College of Nursing. She earned her Bachelors of Science in Nursing at Bowling Green State University and her Master’s in Mental Health Nursing at the Medical College of Ohio. She is currently completing her dissertation study which is investigating determinants of conflict resolution self-efficacy in interprofessional healthcare teams. Her research interests include interprofessional education and teams and teamwork.

Carol Hasbrouck is the Director of the School for the Advancement of Interprofessional Education and Assistant Professor, Department of Medicine, at the University of Toledo. Previously, she was Assistant Dean for Clinical Skills and Medical Education and directed the Simulation Center at The Ohio State University College of Medicine. She has worked in both undergraduate and graduate medical education in the areas of simulation, testing, evaluation, curriculum development, faculty development, interprofessional education and administration.

**P1-20. Investigating the Impact of TeamSTEPPS Training on an Emergent Evacuation of a Simulated Healthcare Facility**

- **Martha Sexton**, University of Toledo, Toledo, OH, USA
- **Paul P. Rega**, University of Toledo, Toledo, OH, USA
- **Brian Fink**, University of Toledo, Toledo, OH, USA

**Submitted abstract:**

**Background:** In response to an increase in global catastrophic disasters, it is vital the healthcare community is prepared to react quickly and efficiently when patient lives are in danger. Dr Iserson’s published Mattress-Sheet technique provides a method for hospital staff to move patients to safety without the help of outside resources. TeamSTEPPS is also a strategy designed to enhance performance and patient safety. However, it is unknown if the Mattress-Sheet evacuation technique combined with TeamSTEPPS training would result in a more safe and effective emergent evacuation.

**Objective:** To investigate the impact of TeamSTEPPS training on emergent evacuations in a simulated healthcare setting.

**Methods:** This study uses a quasi-experimental posttest-only research design with nonequivalent comparison groups. Sixty-two University of Toledo students in the health sciences were recruited to participate in an evacuation drill. All participants were taught the Mattress-Sheet technique, however only half were given TeamSTEPPS training before the drill. The Vertical Evacuation Evaluation Form and the Evacuation Measurement Tool were used for data collection.
**Results:** Results demonstrated that participants who received team training had a more organized evacuation \((p=0.01)\) than the participants who did not receive team training as perceived by the standardized patients, participants, and the evaluating physician. It was also found that participants who received team training provided a more secure evacuation \((p=0.05)\), and delivered more appropriate care/treatment \((p=0.03)\) to the patients than the participants who did not receive team training.

**Implications:** It is suggested from the results of a simulated evacuation drill that TeamSTEPPS training improves the organization, security of the patient, and appropriate care/treatment of patients as perceived by the standardized patients, participants, and the evaluating physician. However, TeamSTEPPS training did not improve the level of commitment of personnel or total time of evacuation to safe zone.

**Author Biographies**

Martha Sexton PhD (c), RN, CNS is the Director of the Learning Resource Center and Interprofessional Simulation at the University of Toledo in the College of Nursing. She earned her Bachelors of Science in Nursing at Bowling Green State University and her Master’s in Mental Health Nursing at the Medical College of Ohio. She is currently completing her dissertation study which is investigating determinants of conflict resolution self-efficacy in interprofessional healthcare teams. Her research interests include interprofessional education and teams and teamwork.

Paul Rega MD, FACEP has been a practicing emergency/flight physician for over thirty years. Additionally, he has dedicated a significant portion of his career in disaster deployments, education, and research. He currently serves as an Assistant Professor in the Department of Public Health/Preventative Medicine and the Department of Emergency Medicine at the University of Toledo.

Brian Fink, PhD, MPH, CHES is an epidemiologist and associate professor at the University of Toledo Department of Public Health and Preventive Medicine. He has been involved in interdisciplinary education with a wide variety of students and has assisted with the biostatistics for student- and faculty-led projects. He does a great deal of research in cancer epidemiology and also has been working with colleagues to help expand the educational opportunities and job prospects of students in the MPH program.

**P1-21. Teaching structured approaches to team communication: findings and implications of a Best Evidence Medical Education (BEME) systematic review**

- Sharon Buckley, University of Birmingham, West Midlands, UK
- Lucy Ambrose, Keele University, Staffordshire, UK
- Elizabeth Anderson, University of Leicester, Leicester, UK
- Jamie Coleman, University of Birmingham, West Midlands, UK

**Submitted abstract:**

Increased emphasis on patient safety has led to the widespread use of structured approaches to clinical team communication. This discussion will consider both the implications of our Best Evidence Medical Education (BEME) review of the teaching of such tools in pre-registration curricula and the use of systematic reviews to inform educational practice.

**Background:** recent high profile cases of serious harm to patients have focussed attention on the teaching of patient safety in pre-registration curricula and on the contribution that IPE can make to this.
Errors in clinical communication between members of the multi-disciplinary team account for a significant proportion of untoward incidents. The use of structured approaches, either written or verbal, are often seen as a way of reducing such errors and ‘tools’ such as Situation, Background, Assessment and Recommendation (SBAR) are increasingly used in clinical settings. Although the introduction of such tools into pre-registration curricula has been reported, many questions remain about appropriate approaches to teaching such concepts. As part of the Best Evidence Medical Education (BEME) collaboration, we have undertaken a systematic review to explore the nature of such teaching and its influence on student learning.

**Objectives:** our review addresses the question ‘how does the teaching of a structured tool for communication within and between teams contribute to student learning? It explores the range of tools taught, their contribution to the development of students’ knowledge, skills and attitudes, how such teaching varies with profession and how far it takes place interprofessionally. It aims to make recommendations for the teaching of structured approaches to clinical faculty engaged in developing patient safety curricula.

**Methods:** nine databases were searched for studies that report on the teaching of a structured approach to communication within a pre-registration curriculum for a clinically focussed profession. Tools can support verbal or written communication but must relate to interactions between members of the multi-disciplinary team. Primary studies meeting these criteria are included regardless of methodological approach, language or geographical location. Quality assessment of included studies forms part of our review process.

**Results:** to date, our review has identified 31 studies that meet our inclusion criteria. In only 4 of these did the teaching occur interprofessionally. Of the remaining studies, 12 involved medical students alone, 11 nursing, 2 pharmacy and 2 students from other health professions.

**Implications:** our review raises many questions about both the teaching of structured communication tools in pre-registration curricula and the use of systematic reviews to inform educational practice. How far are the proportions of reported studies an accurate reflection of actual teaching? What are the implications of teaching an important aspect of team communication uni- rather than interprofessionally and how might IP teaching of such tools be encouraged? How likely are our findings to influence practice and how can the results of systematic reviews inform pedagogic decision-making more effectively? Outcomes of the discussion of these and other questions arising from our session will be documented and will inform both the discussion section of our review and its wider dissemination.

**Author Biographies**
Sharon trained as a microbiologist before entering education. She is Chair of the College of Medical and Dental Sciences IPE steering group at Birmingham and has a strong interest in the use of evidence to support educational practice. A National Teaching Fellow, she is now leading her second Best Evidence Medical Education (BEME) systematic review group.

Liz, from an early clinical career (nurse, midwife and health visitor) has led innovations in medical education and led the design of an IPE curriculum shared by three universities, in S. Midlands, UK. She is a National Teaching Fellow. She has served on several national boards for the enhancement of professional education (including CAIPE) and has published widely on IPE.
P1-22. For the Students, by the Students: Exploring the Core Competencies for Interprofessional Collaboration through videography

- **Stacey Pinnock**, Nova Southeastern University, College of Osteopathic Medicine, Ft. Lauderdale, FL, USA
- **Kimberly Valenti**, Nova Southeastern University, College of Osteopathic Medicine, Ft. Lauderdale, FL, USA
- **Shadana James**, Nova Southeastern University, College of Osteopathic Medicine, Ft. Lauderdale, FL, USA

Submitted abstract:
A study of first year medical, nursing, and dental students revealed students have professional stereotypes even before beginning their studies (Reeves, 2010). A collaborative ready health workforce stems from collaboratively educated health professions students. Just as students need to develop cultural competence in working with patients, they need to develop an “interprofessional cultural competence” to work with their colleagues. Communication skills that are taught to health professions students usually focus on interactions with patients and families, not on communication across professions.

This session will describe the process and outcomes of a “man-on the street” type video production made for a Medicine, Health, and Society class to help students explore the four competency domains of interprofessional collaborative practice: Values and Ethics; Roles and Responsibilities; Interprofessional Communication; and Teams and Teamwork.

Upon completion of this session, participants will be able to:
1. Discuss the Core Competencies for Interprofessional Collaborative Practice as it relates to professional identity and professionalism.
2. Explore changes in attitudes and perception of health professions students regarding roles and responsibilities due to class session.
3. Understand the benefit of using media to encourage small group discussion and personal reflection regarding socialization processes and inherent beliefs.

P1-23. Interprofessional Orientation for Allied Health Professional Utilizing Simulation Learning- A Pilot Study

- **Kristen Will**, Mayo Clinic in Arizona, Phoenix, AZ, USA
- **Rebecca Wilson**, University of Utah, Salt Lake City, UT, USA

Submitted abstract:
**Background:** New employees benefit from organizational socialization in order to become effective members of the team. Within healthcare, working with interprofessional teams is a key component of success. Numerous studies indicate positive results when a multidisciplinary approach is applied to training, namely in increased collaboration, knowledge of other allied health personnel roles and improved patient care.2,4-6 Furthermore, simulation learning has similarly proven its benefit amongst many groups of learners placing them into “real life” scenarios and enhancing many aspects of patient care.1,3,7
**Objectives:** The purpose of this pilot study was to test the feasibility and potential benefits of an interprofessional orientation class that focused on communication within the structure and culture of the organization.

**Methods:** This novel, 4-hour educational intervention consisted of a didactic session, two 20-minute simulation scenarios, and a post-simulation debriefing session. The didactic session focused on communication, interprofessional roles/responsibilities, and organizational culture. The learners were divided into two groups with representation from various allied health disciplines (nursing, physician assistant, respiratory therapy, physical therapy, and pharmacy). Each group participated in a simulated patient scenario while the other group actively observed in another classroom. The observer group was given a checklist of items to review for more active participation. At the end of both sessions, the group reconvened for a debriefing session. To assess perceived benefit of this educational intervention, baseline and immediate post-course evaluations were conducted.

**Results:** The overall evaluation of the course was positive. Participants reported improved understanding of interprofessional communication within the organizational structure and gains in appreciation of the roles and contributions of other allied health professionals.

**Conclusion:** Incorporation of interprofessional orientation modules focusing on organizational structure and communication were valued by participants; specifically learning who, how and when to contact other allied health professionals in serving the needs of the patient.

**P1-24. Improving quality and safety for diverse populations: an innovative interprofessional curriculum**

- **Gail Gall,** MGH Institute of Health Professions School of Nursing, Charlestown, MA, USA
- **Alexander R. Green,** Massachusetts General Hospital, The Disparities Solutions Center, Boston, MA, USA
- **Karey Kenst,** Massachusetts General Hospital, The Disparities Solutions Center, Boston, MA, USA
- **Joseph R. Betancourt,** Massachusetts General Hospital, The Disparities Solutions Center, Boston, MA, USA
- **Andrea Madu,** Massachusetts General Hospital, The Disparities Solutions Center, Boston, MA, USA

**Submitted abstract:**
Research suggests that patients with limited English proficiency (LEP) are more likely to suffer adverse events than their English-speaking counterparts, and these events tend to have more serious consequences. Health professions students do not typically receive training on the principles of patient safety and the prevention of medical errors, and there exist few, if any, curricula that focus on safety for the growing number of patients with LEP in the U.S.

The MGH Institute of Health Professions in collaboration with the MGH Disparities Solution Center, designed an interprofessional curriculum for medical and nursing students, Providing Safe and Effective Care for Patients with Limited English Proficiency. The curriculum develops students’ capacity to provide safe care for patients with LEP and is built on an e-learning platform with associated classroom sessions and online group assignments.

Curriculum objectives include:
• Educating health professions students to understand the evidence of disparities among patients with LEP, work effectively with interpreters and other care team members, and explore how systems can be improved to ensure quality and safety for patients with LEP;
• Promoting transformation of the healthcare system toward prioritizing the needs of culturally diverse patients with LEP; and
• Contributing to the field of interprofessional education and team-based care.

Curriculum content and teaching approaches were developed based on focus group feedback and usability testing with HMS and MGH IHP School of Nursing students and faculty. The curriculum was pilot tested with nursing students and a project advisory board consisting of medical and nursing faculty as well as the Director of Interpreter Services of Massachusetts General Hospital. Methods to measure success included:
• A pre-post test to measure changes in students’ knowledge, attitudes, and skills for providing safe care for patients with LEP and
• End-of-course surveys and focus groups with students and advisory board members to assess course design, content, and effectiveness.

Survey results showed:
• 100% of students and advisory board members agreed or strongly agreed that the course will help students provide safe care for patients with LEP;
• 93% of students and 100% of advisory board members agreed or strongly agreed that it was helpful for students to learn in an interprofessional environment; and
• 87% of students and 100% of advisory board members agreed or strongly agreed that the course should be a required component of medical and nursing school curricula.

Student pre-post test results and focus group data will be available for presentation in June. This curriculum provides both the structure and flexibility to be adopted by academic institutions. The blended learning approach using the e-learning program along with interactive classroom sessions and online discussions offers an innovative approach to interprofessional education. Medical and nursing students placed a high value on formal training related to caring for patients with LEP and the insights gained from engaging with peers in other health professions.

P1-25. Examination of the environmental factor to promote IPW

• Mariko Otsuka, Saitama Prefectural University, Koshigaya, Saitama, Japan
• Naoko Kunisawa, Health Cooperative Saitama, the Research Institute of Community and Health, Kawaguchi, Saitama, Japan
• Yuu Maruyama, Saitama Prefectural University, Koshigaya, Saitama, Japan
• Mitsuyo Azegami, Saitama Prefectural University, Koshigaya, Saitama, Japan

Submitted abstract:
Objective: The study purpose compares the characteristic of the Interprofessional work competency that the staff of 6 hospitals evaluated by oneself and is to search for environmental factor of the IPW promotion.

Methods: A 24-item self-administered questionnaire survey created by the authors was conducted by post between December 2011 and February 2012 on all 2,231 staff at 6 hospitals. Responses were given on a 4-point scale and data were analyzed using SPSS Ver.20 for Windows. The research significance and
objectives, the voluntary nature of participation and guarantee of anonymity were explained in writing to the hospital directors and subjects, and participation consent was obtained directly in writing from hospital directors and implicitly by return of the questionnaires from subjects. Approval for the study was obtained from the Ethics Review Board of SPU.

**Results:** A total of 1,530 responses were received (collection rate, 51.2%) from 202 staffs of the A Hospital (51.0%), 496 staffs of the B, 256 staffs of the C (66.3%), 416 staffs of the D (45.9%), 62 staffs of the E (45.8%), 98 staffs of the F (46.0%). The mean of 24 items was 62.9 in the whole 6 hospitals. It was A hospital 61.6, B 59.9, C 70.0, D 65.0, E 55.7, F 58.8. The mean of the C Hospital was significantly higher than the whole 6 hospitals. The C Hospital is the establishment fourth year and established 5 other hospitals more than 20 years ago.

**Discussion:** IPW is interactive, and it is thought that the self-evaluation of the staff shows an organized tendency. A manager having been a promoter of IPW, the aim of the hospital are clear, and, in the factor that the self-evaluation of the C house staff was high in, it is thought that the morale of the staff is high.

**P1-26. The Impact of an Interprofessional Symposium on Practice**

- Jessica A. Evans, Virginia Commonwealth University, Richmond, VA, USA
- Kelly S. Lockeman, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- Alan W. Dow, Virginia Commonwealth University, Richmond, VA, USA
- Paul E. Mazmanian, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA

**Submitted abstract:**

**Introduction:** The Emswiller Interprofessional Symposium was held March, 2013 in Richmond Virginia. Attendees were predominantly academicians and practitioners.

**Objectives:** Primary instructional objectives for the Symposium were: 1) recognize and describe how the changing environment of healthcare will increase the need for interprofessional practice 2) discuss how to utilize new approaches to increase interprofessional collaboration and education to improve patient care, and 3) apply lessons from innovative programs in interprofessional education and collaborative practice within education and practice environments.

**Methods:** This interprofessional, continuing professional development symposium was evaluated using a modification of the Commitment to Change (CTC) Model. A post/follow-up approach was used, in which a post-survey was administered at the conclusion of the educational activity, and a follow-up survey was distributed approximately 60 days following the event.

**Results:** Post-symposium data indicated attendees were satisfied with content. Sixty-eight percent of attendees said they would make a change in profession related activities. At sixty days, 53% indicated they had implemented a change. Of those who did not implement a change, 33% stated they lacked the time required to implement the change, 27% maintained that they were in the planning phase, 13% cited a lack of funds, and 13% indicated competing priorities. Compared to those who did not change, those who implemented the change reported higher levels of commitment and confidence following the symposium.

**Implications:** Successful implementation of a practice change was related to attendees’ confidence in change rather than to their commitment to change. Those who plan IPE for continuing professional
development should follow-up with educational activities to support learner commitment. Educational strategies enabling change – such as programs that focus on leading change or follow-up efforts to support change – may have benefit for reaching educational goals of learning and improved health care delivery.

**Author Biographies**
Jessica A. Evans, BS is a Research Assistant for the VCU School of Medicine, Office of Assessment and Evaluation Studies. Ms. Evans holds a Bachelor of Science in Psychology from Virginia Commonwealth University.

Kelly Lockeman, PhD is an assistant professor in the School of Medicine and assistant director for research and evaluation in the Center for Interprofessional Education and Collaborative Care at Virginia Commonwealth University.

Alan Dow, MD, MSHA is an associate professor in the School of Medicine and assistant vice president of health sciences for interprofessional education and collaborative care. He leads the design, implementation, and assessment of major interprofessional programs across his campus which include five health science schools with over 3200 clinical health science students and a major academic health system. His research has been published in Academic Medicine, The Journal of Interprofessional Care, and The Journal of Continuing Education in the Health Professions.

Paul E. Mazmanian, PhD, Professor of Family Medicine and Population Health, Virginia Commonwealth University, serves as Associate Dean, Assessment and Evaluation Studies, School of Medicine; and Director of Evaluation, VCU Center on Clinical and Translational Research.

**P1-27. Using Critical Care Simulations to Enhance Interprofessional Collaboration**
- **Tanya Huff**, Virginia Commonwealth University, School of Nursing, Richmond, VA, USA
- **Shelly Orr**, Virginia Commonwealth University, School of Nursing, Richmond, VA, USA
- **Alan W. Dow**, Virginia Commonwealth University, Richmond, VA, USA

Submitted abstract:
**Background:** Improving collaboration among health professions is vital for safer, higher quality care (IOM, 2003), and training should encompass four core competency domains: values and ethics, roles and responsibilities, interprofessional communication, and teamwork and team-based care (IPEC, 2011).

**Objectives:** In order to increase the interprofessional competency of our graduating nursing and medical students, we sought to incorporate the TeamSTEPPS concepts of leadership, communication, mutual support, and situation monitoring into a team-based care simulation exercise.

**Methods:** During the 2012-2013 academic year, all senior nursing (n = 150) and medicine (n = 170) students participated in a pilot consisting of two, two-hour workshops. During the first workshop, students were briefed about Advanced Cardiac Life Support algorithms and worked as a team through six simulated resuscitation events. Team communication was highlighted and profession-specific responsibilities were minimized. In the second workshop, students assessed and treated different simulated patient scenarios. After each scenario, the students were debriefed as a team with a faculty member about the clinical and teamwork aspects of each case, and they rated their self-efficacy on the relevant competencies.
Results: For academic year 2012-2013, students reported improvement in interprofessional and critical care competencies (range of percent of students agreeing or strongly agreeing by item: 75.6%-89.5%). Students felt more confident in certain areas (e.g. the roles of other professions) than others (e.g. providing feedback interprofessionally). We will review these findings and present current data, including specific findings related to the third workshop, which was added during the current academic year.

Implications: Simulation-based workshops are well-received and an effective approach for teaching skills in critical care and interprofessional collaboration. Our program is a feasible method to implement these curricular objectives. We will discuss the resources and barriers needed to implement this type of learning activity.

P1-28. Faculty Development through Collaborating on Interprofessional Course Creation

- Annemarie Conlon, Virginia Commonwealth University, Richmond, VA, USA
- Susan Johnson, Virginia Commonwealth University, School of Nursing, Richmond, VA, USA
- Jeffrey Delafuente, Virginia Commonwealth University, Richmond, VA, USA
- Peter Boling, Virginia Commonwealth University, Richmond, VA, USA

Submitted abstract:

Background: The implementation of interprofessional education across multiple large professional schools at an academic medical center requires collaboration by faculty. While known potential barriers include schedules, course structures, grading, and different curricular expectations, an underappreciated barrier may be the need for course faculty to evolve their own interprofessional collaboration.

Objectives: To describe collaborative learning by faculty as they worked within an educational leadership team to overcome barriers and implement a large-scale interprofessional education experience across schools of medicine, nursing, pharmacy, and social work.

Methods: Each team member will make a 10 minute presentation about lessons learned in the process of creating and implementing a major web-based interprofessional geriatric education experience for more than 700 senior students annually. We will summarize key ideas gained from a shared faculty development experience, including insights about our own and others’ professions, and have an open discussion with the audience for 30 minutes.

With the committed support of senior administration, a faculty IPE leadership team focused on geriatric care was formed of mid-career professionals who are responsible for courses, curricula, and learner schedules. A technology team designed and tested a web-based asynchronous learning environment where we can form, engage and evaluate groups of learners during extended case-based learning. We also scripted a complex geriatric case for the students in a semester-long experience of approximately 20 hours. After reviewing core competencies for geriatrics and interprofessional education, we designed the unfolding case and question set that tested these competencies. After an initial year involving 529 senior students from 4 schools, we revised the content by applying psychometric analysis and putting an interprofessional faculty group through the exercise in an anonymous REDCap environment to assess which materials, items, and scoring needed revision. These faculty members also precepted learner teams of 7 to 9 students in the case system during two academic years.
**Results:** The faculty leaders found and resolved conflict with regard to case content, questions, competencies, and schedules. Compromise was attained through consensus discussion that forced faculty to reconsider their conceptualization of their own and other professions. In addition, faculty gained better understanding of curricular design and priorities in other schools and learned from each other and from observing students working in the case about strengths and weakness of their curricula. The group reached consensus on grading team efforts by individual students, ultimately settling on a single item because of the need to grade large numbers of learners efficiently, and constructing a matrix of team skills against which to measure learner performance on this item. The leaders also reached agreement on how each school would approach the grading of content-specific competencies. In this work the group was breaking new ground; we were not able to find literature that answered the questions we encountered.

**Implications:** Faculty leadership development in IPE was honed by shared learning that was greatly enhanced by collaborating on content, metrics and observed student behavior within a web-based system that allowed faculty to efficiently observe the curriculum “in use” by large numbers of learners.

**Author Biographies**

Susan Johnson, PhD, RN, NEA-BC is an Assistant Professor of Nursing, who joined the full-time VCU faculty in 2010 after serving for several years as chief nursing officer in a large community hospital. Her research interests include end of life care as well as nursing education.

Jeffrey C. Delafuente, MS, FCCP, FASCP is Professor and Associate Dean for Academic Affairs, VCU School of Pharmacy. He has published in The American Journal of Pharmacy Education, The Journal of the American Pharmacist Association, and The Annals of Pharmacotherapy.

Peter Boling, MD is professor and chair, Division of Geriatric Medicine at Virginia Commonwealth University where he has led and published on curricular reform and innovation for over 2 decades. His 32 year career centers on geriatrics and interprofessional models with a constant theme of team-based models of care for frail and at-risk older adults. He is the PI for the grant which funded development of the case system and is co-leading its dissemination.

Alan Dow, MD, MSHA is an associate professor of Medicine and assistant vice president of health sciences for interprofessional education and collaborative care. He leads the design, implementation, and assessment of major interprofessional programs across five health science schools with over 3,200 clinical health science students and a major academic health system. He has published research in Academic Medicine, The Journal of Interprofessional Care, and The Journal of Continuing Education in the Health Professions.

**P1-29. Service Learning Included: Overcoming Barriers to IPE by Repurposing an Existing Community Day Event**
- **Mary Knab**, MGH Institute of Health Professions, Boston, MA, USA
- **Yumna Khan**, MGH Institute of Health Professions, Boston, MA, USA
Submitted abstract:
*Background.* Educators seeking to implement interprofessional education (IPE) are often challenged by overfull curricula and conflicting student schedules. The MGH Institute of Health Professions overcame these common obstacles by modifying its existing annual Community Day to align with IPE objectives. The event already deployed over 300 first-year students, faculty, and staff to serve the community based on needs identified by partner organizations. In 2013 the Institute integrated the event into a new team-based IPE curriculum designed to build core competencies for collaborative practice.

*Objectives* included meeting local community needs while providing first-year students in nursing, physical therapy, and communications sciences and disorders with early team-based service delivery experiences and reflection on teamwork, communication, and values.

*Methods.* Assigned to interprofessional learning teams of ten, the students began the day with a classroom activity exploring personal styles and collaboration skills. This was followed by two hours of community service led by faculty/staff mentors in 30 different sites. The teams returned for a lunch and debriefing that continued in online discussion boards.

*Results.* Analysis of online discussions revealed student perspectives on factors affecting team function, and beginning insight into benefits and challenges of working in interprofessional teams and the value of serving populations across the lifespan. Students appreciated meeting teammates and informally exchanging information about their respective professions, though felt limited by the timeframe. A survey of community partners and faculty/staff leaders revealed high satisfaction and a desire to continue relationships and expand future offerings.

*Implications.* This model of service learning and community engagement introduces students to the interprofessional competencies necessary to succeed in the complex practice systems they will enter. Repurposing existing institutional events can be a successful strategy for overcoming obstacles to IPE and preparing a ‘collaboration ready’ healthcare workforce.

*Author Biographies*
Mary S. Knab, DPT, PhD is a physical therapist and faculty in the Center for Interprofessional Studies and Innovation at the MGH Institute of Health Professions where she directs the Institute’s new interprofessional curriculum for entry-level students, IMPACT, an acronym for Interprofessional Model for Patient and Client-centered Teams. She served as IMPACT’s liaison to the Community Day Committee. Her scholarship is in IPE and the use of narrative as a vehicle for reflection and learning.

Yumna J. Khan, PhD, MS, CCC-SLP is an ASHA certified speech-language pathologist with varied clinical experience in Early Childhood/Early Intervention and in health care. She is faculty in the department of Communication Sciences and Disorders at the MGH Institute of Health Professions where she is a Clinical Instructor in the Speech, Language and Literacy Center. She served as a member of the Community Day Committee.

Regina F. Doherty OTD, OTR/L is an occupational therapist and the Director of the Doctor of Occupational Therapy Program at the MGH Institute of Health Professions. She has participated on multiple interprofessional committees and grants at the local and national level. She is faculty in the
Institute’s IPE curriculum and her scholarship is in the area of ethical reasoning in the health professions.

P1-30. Teaching Ethics and Professionalism: An Interdisciplinary Approach to Promote Critical Thinking and Collaboration

- **Carole-Rae Reed**, Richard Stockton College of New Jersey, Galloway, NJ, USA

**Submitted abstract:**
This presentation describes the conversion of an existing nursing course into an interdisciplinary course for health science majors. This course explores the concepts and principles of critical thinking, professionalism and ethical behavior. It is a freshman or first semester transfer level course for those health science majors, including students in pre-physical therapy, communication disorders, nursing, psychology, and general health science programs. The course promotes critical thinking and professional collaboration. It involves group projects, discussion, exploration of characteristics of professions and bioethical theories, issues, and case studies in a seminar format. The Critical Thinking test was given during the first and last weeks of class. The same test was given to an all nursing section of the course which focused specifically on the profession of nursing and nursing ethics. The mean change scores between pre-and post-test will be compared to determine if there is an advantage to interdisciplinary education in developing critical thinking. Results will be available for the presentation. The presentation will focus on various strategies used to broaden the scope of the course. The topics of ethics and professionalism are ideal for interdisciplinary education that will prepare students for collaborative practice in the health sciences.

P1-31. Patients as part of the interprofessional team? Not from their perspective

- **Linda Ferguson**, University of Saskatchewan, Saskatoon, SK, Canada
- **Heather Ward**, University of Saskatchewan, Saskatoon, SK, Canada
- **Sharon Card**, University of Saskatchewan, Saskatoon, SK, Canada
- **Suzanne Sheppard**, Saskatoon Health Region, Saskatoon, SK, Canada

**Submitted abstract:**
Using a patient-centred focus, patients and their families are often referred to a being the center of the interprofessional team. Literature makes frequent reference to the inclusion of patients on interprofessional teams, and the active involvement of those patients in decision making about their own healthcare. As researchers, we were particularly interested to determine if patients with chronic illnesses and repeated admissions to an acute care medical unit in a tertiary care hospital had the same perspectives. The objective of our research was to determine how patients and their families viewed their relationships with the healthcare professionals providing their care on an in-patient medical unit. Using Interpretive Description methodology, we interviewed 15 patients and 8 of their family members, all in-patients for varying periods on the same unit over a three month period, to determine their experiences of team-based care and involvement in decision making. In addition, we also interviewed 15 healthcare professionals from the same nursing unit.

Our findings were very interesting. Patients indicated that they were unaware of a team approach to their care, stating that physicians were their primary healthcare professionals, with all other healthcare professionals viewed as auxiliary to the physicians. Patients and their families provided examples of how they partnered with some of their healthcare providers as well as examples of where they felt isolated or alienated from their healthcare professionals. About half of patients/families expressed satisfaction with their relationships with their healthcare professionals, while a number of others were very
dissatisfied with aspects of care. Overall, from patient perspectives, Interprofessional teams were not
evident to them, and most did not feel involved in decision making with their physicians or other
healthcare professionals. According to these patients and their families, they were not part of the
interprofessional team

P1-32. Healthcare professionals’ views of the role of the patient in acute care
Interprofessional teams

- **Linda Ferguson**, University of Saskatchewan, Saskatoon, SK, Canada
- **Heather Ward**, University of Saskatchewan, Saskatoon, SK, Canada
- **Sharon Card**, University of Saskatchewan, Saskatoon, SK, Canada
- **Suzanne Sheppard**, Saskatoon Health Region, Saskatoon, SK, Canada

Submitted abstract:
Interprofessional collaboration among healthcare professionals and their patients/families is promoted
as the ideal of interprofessional care. Using a relational approach, patients and their families are seen as
integral members of the team in determining the best approaches to their health care. In acute care
settings, the collaborative partnerships for patient care may not be as evident as those in community or
clinic practices. Nonetheless, the ideal pervades the literature and the visionary statements of various
healthcare agencies.

In this research project, our objective was to explore professional caregiver and patient/family
perspectives on the role of the patient in interprofessional healthcare teams in acute care settings. An
external and experienced healthcare professional interviewed 18 in-patients, 8 family members, and 15
of their multi-professional healthcare providers to determine their perceptions of the role of patients
and their families in interprofessional teams. All patients and healthcare providers were from a single
acute care medical nursing unit in a tertiary care hospital in which interprofessional collaboration is an
espoused value and ideal of care. Using an Interpretive Descriptive approach, we collected and analyzed
data to identify themes relevant to our research objective.

Findings demonstrated that the healthcare professionals on the units has differing views of the roles of
the patients and their families in Interprofessional teams, their own roles in the Interprofessional teams,
and their abilities to function as teams in acute care. The findings were not necessarily related to the age
or experience of the health professional or to their professional roles. Collaboration was embraced as a
necessary part of healthcare in the acute care setting but the concept of team was not apparent in many
of the practitioners. In this presentation, we will explore our findings and the implications for education
of new practitioners and in service for existing professional

P1-33. High Fidelity Patient Simulation and Experiential Learning: Recruiting, Advising, and
Teaching the New Generation

- **Anne Thompson**, Armstrong Atlantic State University, Savannah, GA, USA
- **Kelly Rossler**, Armstrong Atlantic State University, Savannah, GA, USA
- **Janet R. Buelow**, Armstrong Atlantic State University, Savannah, GA, USA

Submitted abstract:
**Background:** An innovative project that combines interprofessional education and college advisement
through experiential learning is in its first year at Armstrong Atlantic State University. While many
students seek to enter into pre-licensure health professions programs of study, other students are undecided as to a major or career choice.

**Objectives:** This project offers an interprofessional learning experience to help students seeking to select or confirm an appropriate major; develops a website dedicated to interprofessional collaboration (IPC) and careers in health professions; and supports students beyond graduation as professionals working throughout the region.

**Methods:** All university students are invited to participate in the experience. Utilizing an interactive, team-based disaster scenario, students interested in health professions will work in teams with students already enrolled in pre-licensure study. The hands-on simulation combines “live” roles as providers and patients, as well as critical care experience with high-fidelity human patient simulators. Faculty and staff leaders hold student debriefings designed to explain the roles of healthcare personnel in the simulation, as well as the major fields of study needed to enter these professions. Additional resources for college advisement, careers, teamwork, community resources, and links to other IPC sites will be provided through a dedicated website, which will serve as an open resource for students, alumni, and the public.

**Results** will be assessed in spring 2014, including participation, choice of majors, and team process and performance for “live” and simulated scenarios.

**Implications:** This project places pre-licensure students in teams with general university students, providing a rich opportunity for peer advising and identification of career goals, as well as instilling the concept of teamwork in all students. By participating in the on-campus interprofessional scenario and utilizing the interprofessional website, these students will be offered a unique opportunity to develop collaborative partnerships which can be supported before and after graduation.

**P1-34. Blogging as a Tool to Engage Nursing Students: Bringing Interprofessional Education to Life in Undergraduate Health Disciplines**

- **Sandra Bassendowski,** University of Saskatchewan, College of Nursing, Regina, SK, Canada
- **Kelly Penz,** University of Saskatchewan, College of Nursing, Regina, SK, Canada

**Submitted abstract:**
This session will focus on the design, development, and delivery of an innovative nursing education assignment for undergraduate students involved in several interprofessional problem-based learning (iPBL) sessions. As part of a collaborative assignment for two nursing education courses (NURS 332 Leadership in Education and Care, and NURS 306 Exploring Chronicity and Aging courses) at the University of Saskatchewan, faculty members designed a reflective blogging initiative founded on the (6) interprofessional competencies of the Canadian Interprofessional Health Collaborative (CIHC) National Interprofessional Competency Framework (2010). Following engagement in the iPBL sessions (e.g., Pain Session, Palliative Care Sessions) with students from a variety of health disciplines (e.g., medicine, psychology, social work), nursing students participated in reflective blogging on the interprofessional competencies that are essential for successful collaborative practice. The CIHC competencies include: Interprofessional Communication, Patient/client/family/community-centered Care, Roles Clarification, Team Functioning, Collaborative Leadership, and Interprofessional Conflict Resolution. The three phase assignment included, pre-reflection, reflection, and post-reflection questions designed to promote reflexivity and participatory critique of their involvement in the iPBL sessions. The pre-reflection assignment challenged students to consider their initial opinions about and past experiences of
interprofessional collaborative practice. One pre-reflection question asked “Based on your current understanding of Interprofessional Communication principles, what are the primary factors influencing the development of trusting relationships between patients/clients/family members and other health care team members?” Students attended the first iPBL day long interprofessional session on the topic of Pain and used the blogging initiative to reflect on their actual experiences. Following additional readings, class discussions, and subsequent iPBL sessions, students then completed the post-reflection blogging. Faculty designed an evaluation form for students to complete regarding the initiative and their understanding of interprofessional education and practice. The session will provide time for participants to ask questions about ‘lessons learned’ regarding this blogging assignment that focused on reflection and critique.

P1-35. IPE in nursing education: a new way of knowing

- Marian George, Red Deer College, Red Deer, AB, Canada

Submitted abstract:
**Background:** Teaching and learning in nursing is changing in response to increased complexity and societal issues in client care. A call for innovation in nursing education is imminent and IPE may be the innovative teaching process needed to address this change. However, change may be difficult in a bound profession such as nursing. The intent of completing this research was to identify the perspectives and meanings of IPE as seen through the eyes of nurse educators.

**Purpose:** To explore how nurse educators understand interprofessional education (IPE) in the context of nursing education, and explore how nurse educators use interprofessional education when teaching in an undergraduate nursing program in a western Canada.

**Objectives:** 1. to determine how nurse educators define interprofessional education; 2. to identify what informs nurse educators understanding and use of interprofessional education in nursing education.

**Methods:** Grounded in constructivism, qualitative methodology was used. A single exploratory case study provided opportunity to explore a real-life complex phenomenon in the natural setting of nursing education (n=15). Data analysis was framed in social constructivism and transformative learning theory, underpinned by adult learning theory.

**Results:** A knowledge gap about IPE in nurses’ ways of knowing exists; it may be time to add to the established culture of nursing and explore a way of knowing about IPE in nursing, adding to the characteristics and ways of knowing of the profession. As the nurse educators suggested, this new way of knowing may require risk taking and motivation but it may be time for nurse educators to move beyond the insular knowledge of the traditional profession in order to teach in the 21st century

**Implications:** Faculty development in ways of knowing about interprofessional education is needed. Future research to illuminate how language guides nursing education, policy development, and a new way of knowing about IPE.

P1-36. Student Perspectives of an Interprofessional Collaborative Clinical Experience

- Marcella Oenchuk, University of Saskatchewan, College of Nursing, Saskatoon, SK, Canada
- Jill Bally, University of Saskatchewan, College of Nursing, Saskatoon, SK, Canada
- Shelley Spurr, University of Saskatchewan, College of Nursing, Saskatoon, SK, Canada
Submitted abstract:

**Purpose:** Nursing practica were developed by nursing faculty in one Western Canadian school system to support wellness in children from core neighborhoods. Undergraduate nursing students collaborated with school professionals, elementary students, and their families to learn about the pediatric needs and to improve health outcomes among this population. An interprofessional team approach included Faculty primarily from dentistry and nursing, professionals from education, and speech and language therapists. Students were expected to complete wellness assessments including detailed oral health examinations and screening and delivery of educational programs. Oral health has been neglected but is a fundamental component of overall health assessments. Canadian children have a high rate of dental disease especially those of lower socio-economic status.

**Methods:** Of thirty-five nursing students that participated in an interprofessional collaborative nursing clinical practicum, thirty students provided consent for their reflective journals to be utilized in this evaluative project. Their written reflections were entered into NVivo for qualitative analyses.

**Results:** Their reflections included salient topics and descriptive assessments of the school children’s health. The emergent topics were coded into 4 main themes family, learning, successes, and shortcomings. Overall the students revealed the project was successful both on a personal level, as well as it succeeding at promoting health for school children.

**Conclusions:** These findings will not only allow this program to build and improve the collaborative relationships and the existing practica but also provide insight for future research. This experience provided students with a foundation for delivering care in an intersectoral manner and an opportunity for applying knowledge, learning new information, and renegotiating presuppositions.

P1-37. Defining Our Terms Defining Ourselves

- **William Gordon,** Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

Submitted abstract:

**Background:** The words we choose to express ourselves are a reflection of what we believe and they help define what we are doing. In short, language matters and so do the words we utilize. They matter particularly as we attempt to revolutionize a paradigm of cooperative work to improve outcomes in patient care. Two words that are used nearly interchangeably in the course of describing teams are the words collaborative and interprofessional, and yet they are not equal. They describe relationships among team members that carry vastly different expectations, while we inaccurately talk about our “collaborative interprofessional teams” as if the terms were universally understood. The resulting confusion about who we are and how we are doing teamwork undermines our goals of clearer communication and clarifying roles and responsibilities.

The **objective** of this poster presentation will be to examine what is meant by these two terms utilizing direct comparison, identifying where they are similar and different, and most importantly clarifying how they should be used in our interprofessional conversations. In drawing these distinctions, the boundaries of their respective use will be drawn, and clearer communication will be the result.

The **methodology** will be to compare these two words in terms of their respective culturally understood connotation, then applying those meanings and their implications across a variety of domains,
illustrating how collaborative teams are composed and function differently from interprofessional ones. These domains will include how the teams are structured, motivated, think/behave, and engage in activities of trust and accountability. The results will be to provide a more articulate foundation for describing our teams, thereby facilitating communication and clarifying expectations.

The implications of this presentation are broad in that they begin to codify meaning of terms that are loosely understood and whose use may create chaos and confusion.

P1-38. More Than Getting Along: Effective Team Structures

- William Gordon, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- Wendy Rheault, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- Gregory L. Hall, Chicago, IL, USA

Submitted abstract:

**Background:** Stratification of roles and responsibilities among health professions and a long academic and social history of the primacy of medical doctors in decision-making have led to hierarchical teams and leadership. As interprofessional health care education and practice intersects with these realities in hospitals and medical centers, academia, and care provision teams at the local level, emerging questions related to positive patient outcomes challenge these core models.

Hierarchy has significant limitations, impacting the free exchange of ideas and open communication. While the practices of medicine and health care may be seen as a clinical endeavor, the building of and functioning within teams is relational. Because hierarchies represent power held at a distance, collaborative (and moreover interprofessional) team functioning is significantly impaired.

**Objectives:**

1. Discuss consequences to patients related to inferior team interactions, particularly those of communication and exchange of information and ideas.
2. Analyze differences between hierarchies, heterarchies, homoarchies, and self-organizing systems (autopoiesis).
3. Explain and justify which medical teams should consider alternatives to hierarchical structures.

**Methods:** The andragogy for this workshop will be:

1. Relate sample stories of medical errors leading to negative patient outcomes, and reviews of statistical data documenting these factors in the American health care system as a whole.
2. Discuss in think/pair/share format personal narratives or known examples of negative patient outcomes, analyzing what causes failures, and determining consequences to the patients and families.
3. Diagram the Tuckman model of team formation (forming, storming, norming, performing) as an illustration of predominant leadership and functioning styles of hierarchies and interdependence. Similarly compare homoarchy and self-organization, utilizing the work of Margaret Wheatley.
4. Summarize the Geert Hofstede Power Distance Index model to discuss hierarchy and its impact on engagement and communication.
5. In small groups, generate a list of qualities and characteristics needed within organizational and leadership models that permit optimal interprofessional/interdependent team functioning.
6. Contrast organizational styles and compare them to the previously created target list (#6).
7. Synthesize the imperatives that these comparisons present and explore strategies for transitioning health care and academic teams to more effective models.

Results: It is anticipated that this workshop will provoke a larger discussion about how we structure teams both academically and professionally.

Implications: This workshop initiates conversations regarding the radical restructuring needed for interprofessional teams to function. It is acknowledged that each of these models represents not a stationary point on a scale, but a range of possibilities. By identifying organizational forms that will work better to ensure more positive patient outcomes, it is hoped that restructuring opportunities will be seen in local interprofessional education and practice.

P1-39. Bridging the Space Between Professions with Space

- William Gordon, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- John E. Vitale, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

Submitted abstract:

Background: In evidence-based design, it has been demonstrated that simple changes in environment have profound and often unintended consequences for inhabitants of those spaces. Whether it is an evolutionary reality of being adaptive to our environment or simply because we find particular spaces convenient or conducive to a task, major themes and details alike matter in how we design and construct the environs in which we live and work. Ultimately, designing environments to foster collaborative relationships impacts our ability to provide real service to those intended—patients and other healthcare consumers. Reaching beyond mere metaphor, our spaces speak to what are we doing and why are we doing it.

Objectives:
- Appreciate the role the built environment plays in shaping relationships.
- Examine how the traditional academic culture (including its influence on environmental design) impacts the success of interprofessional effort.
- Identify structure and process barriers to facilitating interprofessional practice and education.

Methods:
1. Examine blueprint schematics of existing interprofessional and collaborative spaces.
2. Small group breakouts will brainstorm and discuss the implications of such designs in terms of the formation of interprofessional teams and efforts.
3. In a large group discussion, we will examine more images that relate to collaborative work and how these inform competition, power distance, and service. Discussion points may include ratios of collaborative versus private time/space/work.

Results: Critically examine how health care environments and academic spaces are influencing their collaborative efforts.

Implications: This presentation invites new perspectives and recognition that developing truly interprofessional environments needs to be revolutionary process. We can't build new buildings with old bricks. This workshop will be a catalyst for the phenomenon of interprofessionalism, which has still not emerged organically from current environmental, social, and educational structures. Because
patient safety is paramount, interprofessional practices must be evoked. One consideration is to look at the built environment, which challenges us to ask how we will adapt to the clearly emerging need for new process, structures, attitudes, and practices.

P1-40. What and how do healthcare professions learn in an interprofessional facilitator training program – An exploratory study

- **Junji Haruta**, University of Tokyo, Graduate School of Medicine, Tokyo, Japan
- **Hiroshi Nishigori**, Kyoto University, Center for Medical Education, Kyoto, Japan

Submitted abstract:

**Background:** Based on recent trend in interprofessional education (IPE), we became more and more recognized that facilitator’s role is critically important to promote it (Carpenter & Dickinson, 2008). However, it was not well-clarified how competent facilitators were trained in the context of IPE. We developed an interprofessional facilitator training program for healthcare professions. The objective of the study is to clarify what and how healthcare professions learn in this practical program.

**Method:** The program was developed based on adult learning theory. The following three competencies were set (Banfield and Lackie, 2009); interprofessional facilitation, collaborative patient-centered practice, and cultural sensitivity and safety. The participants are a family physician, a psychiatrist, three nurses and two physiotherapists, and they have studies in this program for one and a half years since 2012. We developed and implemented the program using the community of inquiry (COI) model(Patricia M,Shields.2003); a face-to-face workshop for two days, online learning via Facebook®, and Skype® meetings once a month. We utilized Facebook® to share participants’ experiences, their reflection and discussions. The first author (JH) facilitated Skype® meetings, including discussion and reflection. As a program evaluation, we analyzed the Facebook® comments qualitatively, using content analysis, based on the COI model. We also conducted a focus group for participants, the results of which were transcribed and analyzed by thematic analysis.

**Result:** Among all the Facebook® comments, we found 59 codes for “Cognitive presence”, 30 for “Social presence” and 0 for “Teaching presence”. In the transcription of a focus group, we found that participants learned by verbalization and metacognition, and were motivated from peers and facilitators on Skype® meetings. Focus group also revealed that their motivation was “infected” among participants.

**Conclusion:** Our program promoted “full participation” for participants and functioned as “Community of Practice”.

P1-41. Interprofessional Collaboration on the Run: A Flexible Continuing Interprofessional Professional Development Online Module Series

- **Victoria Wood**, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- **John Cheng**, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- **Donna Drynan**, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- **Christie Newton**, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada

Submitted abstract:
**Background:** In 2008, the College of Health Disciplines at the University of British Columbia developed a continuing professional development workshop series for health and human service practitioners to enable them to incorporate elements of interprofessional collaboration into practice. Based on the Canadian Interprofessional Competency Framework, this series took place over several days and was positively evaluated. However many practitioners do not have several days to devote to the workshops and so an abridged version was developed to allow for lunchtime sessions using online learning.

**Objectives:** The College of Health Disciplines developed a new and abridged series of online modules to: 1) enhance participants’ ability to practice collaboratively; and 2) overcome some of the logistical barriers associated with the delivery of continuing interprofessional professional development.  

**Methodology:** The College designed, piloted and evaluated this series of six online learning modules each focused on one of the competencies in the national competency framework. The modules were preceded by an introductory model to set the stage for the series.

**Results:** Feedback was gathered through an online survey, which informed revisions to the modules. The online survey data also speaks to the effectiveness of the modules in helping learners develop the competencies necessary for interprofessional collaboration within busy practice schedules.

**Implications:** The ‘IPC on the Run’ series uses short, user-friendly, online modules to facilitate improved collaboration in the clinical setting by a wide range of health professions. It is cost-effective and has the potential to enhance collaborative practice models.

**Author Biographies**

Victoria Wood, MA has been working in the education field, focusing on interprofessional education and collaboration, for over 6 years. She has extensive experience supporting the development and delivery of interprofessional curriculum across the continuum of learning, including university-based health science education and professional development to support collaborative practice. She has published in peer reviewed journals and has presented on interprofessional education related topics at national and international conferences.

John Cheng, BBA is the Web Technology and Communications Manager at the College of Health Disciplines, where he collaborates around a diverse range of projects focusing on the convergence of web and educational technologies. His passion is to foster technology-enhanced learning and user experience design in education.

Donna Drynan is the Academic Fieldwork Coordinator in the Department of Occupational Science and Occupational Therapy and the Director of interprofessional practice education in the Division of interprofessional education and practice at the College of Health Disciplines, UBC. She has been an OT for 28 years and teaching at UBC since 1994. She has experience in creating classroom based and online curriculum in the area of supporting students in the practice setting.

Christie Newton MD, CFPC, FCFP is the Director of Continuing Professional Development for the Division of Interprofessional Education of the College of Health Disciplines at UBC. In this role she has extensive experience in developing and delivering professional development programs to enhance capacity for interprofessional collaborative practice provincially, nationally, and internationally since 2006.

Lesley Bainbridge, BSR(PT), MEd, PhD holds a master’s degree in education and an interdisciplinary doctoral degree with a focus on interprofessional health education. She is the Director, Interprofessional
Education in the Faculty of Medicine and Associate Principal, College of Health Disciplines at the University of British Columbia. She has been, and is currently, principal or co-investigator on several research grants and has published in peer reviewed journals and presented at national and international conferences on IPE.

P1-42. Interprofessional Education Passport: An Online System Embedded into Curricula

- Nancy Yp, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- Victoria Wood, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- John Cheng, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada

Submitted abstract:
This presentation will share the experience of developing and implementing an online tool to support interprofessional education (IPE). It will discuss lessons learned and identify key factors to consider when doing so.

Background: In 2012, the College of Health Disciplines at the University of British Columbia (UBC) launched a new Interprofessional Education (IPE) Passport. This online system is designed to support the integration of IPE into curricula across the health and human service (HHS) programs at UBC. Through this Passport, students can search and register for IPE activities, track their completion, and follow their progress towards meeting IPE competencies.

Objectives: The Passport has been implemented as a means to:
1. Build capacity for IPE;
2. Increase the number of students participating in IPE;
3. Formalize IPE within HHS curricula; and
4. Support programs in meeting IPE accreditation standards.

Methods: The College has been working with the 15 HHS programs at UBC to develop and implement the Passport in a way that meets the diverse needs of their students. The system itself enables us to track who is participating in what IPE, when and where, and to what effect.

Results: Currently, eight health and human service programs across the University have made the IPE Passport mandatory with an expectation for students to complete a minimum number of IPE activities. The Passport formally recognizes students for their involvement in IPE and provides documentation in their course and/or portfolio.

Implications: While there are many challenges to developing and implementing an IPE Passport, it provides a way for HHS programs to embed IPE into timetables and encourages students to see the importance of IPE in their program of study.

P1-43. Enhancing Interprofessional Learning Through a Patient-Centred and Reality-Based Video Series

- John Cheng, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- Victoria Wood, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
Lynda Eccott, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada

Submitted abstract:
Background: The use of technology is one of the many strategies being used to overcome some of the logistical barriers to interprofessional education (IPE). Incorporating multimedia, such as videos, into both online and classroom-based IPE can engage learners, explain difficult concepts, and inspire creativity. However, there are few existing videos that effectively demonstrate the benefits of interprofessional collaboration, patient perspectives, and interprofessional competence. In 2012, the College of Health Disciplines at the University of British Columbia received funding to develop, film and implement a series of story-based videos and supporting materials for IPE. This presentation shares our novice experience as educational video producers. We will share some of the videos, discuss their development, and present findings from an evaluation of this resource.

Objectives:
1. Enhance both online and face-to-face IPE;
2. Depict each of the interprofessional competencies in the National Interprofessional Competency Framework;
3. Highlight the benefits of a collaborative approach to health care; and
4. Engage learners in a creative way.

Methodology: The video series was produced in collaboration with students, faculty, and health authority representatives. All the videos are filmed from a patient’s point of view, using a different analogy to depict each competency domain. The videos have been embedded within an online module series. Qualitative feedback from a pilot of the modules series speaks to the effectiveness of the videos in enhancing online IPE.

Results: The College offers the video series as a standalone DVD set, video stream, or component of online curricula. Feedback gathered from faculty, students and health authority representatives indicate that the use of videos enhances online learning.

Implications: A patient-centred, reality-based video series provides meaningful, relevant and engaging interprofessional learning experiences for students and health professionals and can be delivered with a flexibility that will enhance existing and future learning activities.

Author Biographies
John Cheng, BBA is the Web Technology and Communications Manager at the College of Health Disciplines, where he collaborates around a diverse range of projects focusing on the convergence of web and educational technologies. His passion is to foster technology-enhanced learning and user experience design in education.

Victoria Wood, MA has been working in the education field, focusing on interprofessional education and collaboration, for over 6 years. She has extensive experience supporting the development and delivery of interprofessional curriculum across the continuum of learning, including university-based health science education and professional development to support collaborative practice. She has published in peer reviewed journals and has presented on interprofessional education related topics at national and international conferences.
Lynda Eccott holds a Master’s degree in Pharmaceutical Sciences, and is a Senior Instructor in the Faculty of Pharmaceutical Sciences. She is the Director of Interprofessional Curriculum at the College of Health Disciplines and the Coordinator of IPE within her faculty. Lynda has been involved in developing and evaluating interprofessional learning activities on the UBC campus since 2007.

P1-44. Enhancing the Care Navigation Model: Results From Two Qualitative Content Analyses of Navigator Roles and Responsibilities

- Robert M. Shapiro, II, University of Kentucky, Chandler Medical Center Library, Lexington, KY, USA
- Jeffrey T. Huber, University of Kentucky, School of Library and Information Science, Lexington, KY, USA
- Tyler Nix, University of Kentucky, School of Library and Information Science, Lexington, KY, USA
- Andrea L. Pfeifle, University of Kentucky, Lexington, KY, USA

Submitted abstract:
**Background:** According to the American Medical Association, “a patient navigator is someone whose primary responsibility is to provide personalized guidance to patients as they move through the health care system...[and] may be filled formally or informally by individuals with clinical, legal, financial or administrative experience, or by someone who has personal experience facing health care-related challenges.” Few existing studies, however, have investigated the extent to which the navigator’s stated roles and responsibilities can be attributed to one individual/discipline, or, alternatively, necessitate a team-based approach. Two qualitative content analyses were conducted to address this lack of research.

**Objectives:** The initial study identified the roles/activities performed by healthcare navigators and investigated overlap with competencies of health sciences librarians. The second study identified navigator skill sets and education/certification requirements desired by employers, and investigated overlap with accreditation standards for related academic programs.

**Methods:** In the initial study, roles/activities performed by healthcare navigators were gleaned from the published literature and organized into five key professional roles with twenty-two associated activities. The roles/activities were then mapped against stated professional competencies of health sciences librarians. The study resulted in the creation of a roles/activities table indicating areas of correspondence.

In the second study, skillsets and education/certification requirements sought by employers were identified from navigator position postings and mapped to curricula standards set by accreditation agencies in nursing, social work, and public health. The study resulted in the creation of skillset and education requirement tables indicating areas of correspondence.

**Results:** Both studies identified areas of correspondence, however, results suggested that no single profession or academic curriculum was well-suited to undertake all roles/responsibilities of navigators, or fulfill the desired/required skills for posted navigator positions.

**Implications:** Both studies indicate support for a team-based approach to care navigation and suggest that further research in interprofessional navigation models is warranted.
P1-45. Relational coordination and IPC – collaboration across borders

- Heida Valgeirsdóttir, Glostrup Hospital, Glostrup, Denmark
- Morten Finnemann, Glostrup Hospital, Glostrup, Denmark

Submitted abstract:
In 2011 The Northern Region of Denmark decided to use Relational Coordination as a basis for a major reorganization of the region’s hospitals. They saw possibilities in the American Professor Jody Hoffer Gittell’s studies of the characteristics of a well-functioning health system.

Glostrup Hospital in the Capital Region of Denmark has worked since 2009 to fully integrate IPE and IPC as a way of working with treatments and flow of patients. The CEO of the Northern Region of Denmark and the Deputy Director at Glostrup Hospital could see some common goals, and in 2012 their relational coordination led to cooperation on a 2 year project. Focus has been on improving collaboration between professions, departments, hospitals and different sectors – for the benefit of the citizen/patient. The project is based on 13 subprojects, and they are interorganizational and interdisciplinary, containing the complexity typical of many welfare institutions.

Results: The project has shown ways to transform the ideas and theories behind relational coordination to everyday work life. We have increased efficiency and quality of treatments and care of patients. We have cut shifting time between operations and increased the flow of patients through clinics. Quality of the treatments, where different departments are involved, has increased because the different healthcare professionals have a better relational coordination. We have used the IP-COMPASS and we have measured the degree of relational coordination using Gittell’s method. The integration of IPC with relational coordination has added new perspectives, especially in relation to patient involvement.

The collaboration between The Northern Region of Denmark and Glostrup Hospital has challenged old habits and given a degree of certainty, because we have been able to crosscheck results. At the same time we have organized shared education for the people involved and we have inspired each other on leadership development and various implement issues.

P1-46. Developing interprofessional simulation based learning: a Norwegian perspective

- Ingunn Aase, University of Stavanger, Stavanger, Norway
- Karina Aase, University of Stavanger, Stavanger, Norway
- Britt Sætre Hansen, University of Stavanger, Stavanger, Norway
- Scott Reeves, University of California San Francisco, San Francisco, CA, USA

Submitted abstract:
Studies suggest that interprofessional teamwork and collaboration are conducive to safer care and quality patient outcomes (Zwarenstein & Reeves, 2006; Manser, 2009; Reeves, Lewin, Espin et al, 2010). Challenges persist in creating interprofessional teamwork and resilient in professional teams. Differences in understanding of team structure and roles have been found among various healthcare professions. This suggests the need for increased education and awareness of the role that teamwork plays in patient safety (Manser, 2009).

This paper presents a qualitative study that explored the experiences gained by individuals (medical and nursing students and their supervisors as teachers, nurses and physicians) involved in the development
of an interprofessional simulated teamwork session for medical and nursing students. Students and supervisors were interviewed regarding their views in the planning of an interprofessional education session for medical and nursing students. Results from this study focus on recommendations these individuals made about the design of the educational session. While participants reported a number of perceived difficulties with developing this simulated session, they also offer ideas about how to manage these problems.

Negotiated order perspective (Strauss, 1978) was selected as a theoretical approach to help illuminate the results. According to this theory, social order operates within organizations through on-going negotiations where individuals create and shape organizational rules and structures, contributing to the maintenance of social order within an organization. Use of this perspective helped illuminate the role students play in the interprofessional negotiation in their future work, and also how different strategies and tactics were used when collaborating with their colleagues. Fuelled by these everyday stories this study may contribute to improve interprofessional work in practical settings.

References:


P1-47. Collaboration and team work readiness

- Tika Ormond, University of Canterbury, Christchurch, New Zealand

Submitted abstract:
How can we best prepare our graduates to be team players and to respect their fellow worker? Speech-Language pathologists in New Zealand generally work as part of a multi-/inter disciplinary team as well as being part of a team of Speech-Language pathologists. Speech pathology students and probably all health professional students, vary in their ability to become a team player. Clinical education programmes keep trying to find ways to maximise the opportunities for students to be able to develop the appropriate attitude and competence which is an essential ingredient for an effective interdisciplinary team member.

To try and isolate some of the variables the University of the West England, Bristol Entry Level Interprofessional questionnaire will be completed by third and fourth year speech pathology students from a New Zealand university completing a four year undergraduate degree programme. The questionnaire has three scales adapted by Pollard, Miers and Gilchrist in 2004. The areas are co under question are communication and teamwork, interprofessional learning and interprofessional interactions. The questionnaire will be completed following their block and weekly placements which are held in a variety of institutions, e.g. hospital, education service, board of trustee special school. The
variables of frequency of contact, versus stage of learning against perceived competency on the COMPASS (assessment will all be discussed, plus other individual variables.

P1-48. Evidence of Interprofessional Collaboration Competencies in Traditionally Independent Professions: Results from a Collaborative Care Simulation

- **David Dickter**, Western University of Health Sciences, Pomona, CA, USA
- **Patricia Greene**, Western University of Health Sciences, Pomona, CA, USA
- **Jasmine W. Yumori**, Western University of Health Sciences, Pomona, CA, USA

Submitted abstract:

**Background**: The need for behavioral measures of interprofessional competencies in education and practice is essential for preparing healthcare providers to treat geriatric patients and patients with chronic conditions requiring teamwork and collaboration. This need is perhaps most critical for professions that, despite their unique abilities to detect systemic disease, have traditionally practiced apart from others.

**Objectives**: To collect collaborative behavior data for students in two professions that have traditionally practiced as standalone professions: Dentistry and Optometry.

**Methods**: 40 students (20 Dentistry, 20 Optometry) with two years of interprofessional coursework participated in an interprofessional simulation involving collaborative care and geriatric competencies including care coordination, advocating for the patient, and addressing safety and psychosocial issues. Participants interacted in an ambulatory, asynchronous environment with standardized patients and standardized caregivers representing a variety of health professions. Fifteen behaviors were rated for each student. Faculty received training on the use of an evaluation rubric developed for the TOSCE, and each student was evaluated by at least two observers. Student scores were averaged across raters.

**Results**: Student performance varied, from <=20% to >=70% (10.5 out of 15) of behaviors performed. On average, students performed fewer than 50% of behaviors in the rubric. Behaviors on which students were most likely to be proficient included: speaking with both patient and caregiver; inquiring about prescriptions; and making referrals to other health care providers. Areas most needing development included: noticing and correcting safety concerns and hazards; detecting and intervening in possible elder abuse; and obtaining or clarifying missing information in the patient record.

**Implications**: Results suggest that graduate health professionals in two of the most independent professions may nevertheless become effective in some collaborative competencies following interprofessional coursework. Students will benefit from additional opportunities to practice their communication and collaboration skills, particularly with respect to patient (and caregiver) advocacy and safety.

**Author Biographies**

David N. Dickter, PhD is Director, Interprofessional Education Research and Strategic Assessment at Western University of Health Sciences. He leads the development and implementation of assessment programs to evaluate IPE programming, including the design of assessment tools and systems. Prior to WesternU, he spent over 20 years developing and validating psychometric assessments for use in education and the workplace. He earned his Ph.D. in industrial/organizational psychology from Ohio State University.
Patricia Greene, DMD, is Assistant Professor at Western University of Health Sciences. She earned her DMD at Tufts University School of Dental Medicine and began her dental career with the Indian Health Service. Following a two-year anesthesia residency at Loma Linda University Medical Center, she practiced anesthesia for many years in California and Arizona. She previously held a faculty position at UCSF School of Dentistry and actively participated in the school-based sealant program in Arizona.

Jasmine W. Yumori, OD, is Assistant Professor at Western University of Health Sciences. Dr. Yumori is an honors graduate of the UC Berkeley School of Optometry and completed her residency training in geriatric and primary care optometry at the West Los Angeles VA Health Care Center. She currently cares for primary care and vision rehabilitation patients, is involved in dry eye research, and has didactic teaching responsibilities. Her interests include interprofessional education and case-based learning.

P1-49. Comparative Effectiveness of Online Training in Assistive Technology and its Use for Development of Rehabilitation Professionals’ Interprofessionality

- **Mary Goldberg**, University of Pittsburgh, Department of Rehabilitation Science & Technology, Pittsburgh, PA, USA

Submitted abstract:
Assistive technology (AT) is used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible, and a professional designation common to the application of AT is the AT Professional (ATP) held by thousands of health professionals and suppliers. A novel hybrid continuing education certificate program was developed at the University of Pittsburgh to prepare practitioners for the ATP exam through a focus of interprofessional learning and reflective practice. In addition to an expected increase in content knowledge, I hypothesized that both interprofessional learning, defined as interactive and group-based education aimed at improving collaborative practice (Parsell & Bligh, 1999), and reflective practice (Schon, 1983), or the capacity to reflect on action so as to engage in a process of continuous learning, would increase after trainees’ participation in the hybrid program. A mixed methods assessment consisting of validated questionnaires and a unique qualitative coding scheme was conducted on the certificate program. Twenty-eight trainees completed the program. A convenience sample of twenty-eight matched control subjects who completed a similar individual online certificate program was also included to draw marginal inferences between the two groups. Based on pre/post assessments analyzed through STATA and Dedoose data analysis software, trainee gains were made in areas of content knowledge, interprofessionality, and reflectiveness. Predictors of content knowledge included a trainee’s job, expertise level, and experience level. The hybrid training group had greater increases in content knowledge, interprofessionality, and reflectiveness compared to the online group. Study limitations include selection bias, insufficient pre/post data from the control group, the author’s role in the program, and the particular treatment level. This study may be of interest to higher education administrators, faculty in education, health sciences, and those interested in the implications of online vs. hybrid continuing education programs.

Author Biographies
Mary Goldberg, MEd has a background in Administrative and Policy Studies of Education (ADMPS) from the University of Pittsburgh. She is Education and Outreach Project Director at the Department of Rehabilitation Science and Technology, where she serves as Co-PI on four training programs in the field of assistive technology for undergraduates, veterans, and Masters students. Ms. Goldberg is pursuing
her PhD in ADMPS focusing on measuring the effectiveness of online training related to assistive technology.

P1-50. Strengthening Interprofessional Education through Certification Development: Shared Vision, Shared Action, Shared Success

- Rosemary Brander, Queen’s University, Kingston, ON, Canada
- Kiley Rider, Queen’s University, Kingston, ON, Canada
- Anne O’Riordan, Queen’s University, Kingston, ON, Canada
- Jane Johnston, Queen’s University, Kingston, ON, Canada

Submitted abstract:
Background: The Office of Interprofessional Education and Practice at a Canadian university communicated a shared vision of interprofessional (IP) education in a document entitled The IP Quest, which included input from all programs within the Faculty of Health Sciences. This document, adopted by the Faculty’s Board in 2013, provided a clear framework for a required IP curriculum with student participation for all programs. Next steps included designing and implementing an IP Certificate process with a variety of IP learning activities to engage IP learners and faculty through concurrent schedules and while considering accreditation and learning needs for all programs.

Objectives:
1. Describe the steps taken to develop the shared vision and actions for the Faculty of Health Sciences IP Certificate process.
2. Highlight the significant opportunities and challenges during planning and implementation.
3. Outline evaluation processes, findings to date and future plans.

Methods: This will be a case presentation of the first time development and implementation of the Faculty of Health Sciences IP Certificate process across four health disciplines within the Faculty.

Results: Results to date will include a case description of success strategies and challenges during IP Certificate design and implementation. IP Certificate learning activities and criteria will be shared. Plans for student assessment, student and faculty feedback and process evaluation will be discussed.

Implications: Implications for IP collaboration with students, faculty and along with community partners, such as patient/client and clinician mentors, will be discussed.

P1-51. Patient Engagement Project (PEP) Celebrates Independence

- Janice Schuld, Magee Rehabilitation Hospital, Philadelphia, PA, USA
- Marci Ruediger, Magee Rehabilitation Hospital, Philadelphia, PA, USA

Submitted abstract:
After acute care treatment for life changing diagnoses such as a stroke or spinal cord injury, patients seek to achieve the quality of life they had before injury at an acute rehabilitation hospital. The Patient Engagement Project (PEP) is a multidisciplinary care initiative created to foster patient’s independence in their activities of daily living. It was created to insure patients are involved in setting their weekly goals and to have many opportunities to work toward them during therapy and between therapy sessions.
This program also includes care givers, hospital staff, family members, and friends in the encouragement of the patients to perform functional activities throughout the day so that new skills are integrated into everyday life. Nurses play an exceptional role in this project by promoting the engagement of patients in their own care. In conjunction with the multidisciplinary team, the nurses and patients create a goal they seek to achieve during that week of their inpatient stay. Achievement of this objective is evaluated daily and reformulated at the next weekly patient care conference meeting.

Patients are required to attend three hours of therapy daily in an inpatient rehabilitation program. This endeavor allows patients to practice activities outside of therapy with assistance from staff in order to reinforce new abilities with the limited physical capabilities stemming from their injuries. Applying new skills outside of therapy also helps the brain to relearn and remodel, in turn improving strength and function as well.

P1-52. Developing a mobile application to improve continuity of care and strengthen health systems: A call for international collaboration

- **Stefanus Snyman**, Stellenbosch University, Stellenbosch, Western Cape, South Africa
- **Catherine Sykes**, World Confederation for Physical Therapy, London, UK
- **Olaf Kraus de Camargo**, McMaster University, CanChild Research Institute for Childhood Disability, Hamilton, ON, Canada
- **Navreet Bhattal**, The University of Sydney, Sydney, NSW, Australia

Submitted abstract:

**Background:** Community-based, person-centered healthcare strategies are central to realizing the vision to reach health equity in the 21st century. These strategies are designed to identify ill-health, determinants of health, and to facilitate improvements in persons’ health and their participation in all areas of life. Increasingly mobile phone applications are being used to collect health information. The pivotal role of data on functioning and context are often overlooked in these mobile applications. Currently, no mobile application incorporates the International Classification of Functioning, Disability and Health (ICF). This conceptual paper makes the case and calls for international collaboration to develop a mobile application (mICF) based on the ICF.

**Objectives:** It is envisaged that the mICF, in providing a means to collect and transfer ICF-related information, could support interprofessional continuity of care by:
- ensuring accurate, efficient capture of functional status and contextual information
- conveying information securely between service providers in different service settings
- facilitating clinical decision-making by making data readily available
- facilitating administration and reporting through data aggregation
- minimizing need for repeat data collection.

**Practical Implications:**
- User friendly, including built-in decision support, to assist team members
- Low cost, open source, to enable broad accessibility and user configuration
- Provide holistic overview of individual and information flows, including assessment data, progress reports and interprofessional treatment plans
- Capable of real-time reporting and provision of aggregated data sets to health service and system managers
- Integrated single source of functional status information, also accessible to patients
- Able to ‘plug in’ and be interoperable with existing information record systems
- Use in various languages.

**Social Implications:**
- Provide means to collect and transfer ICF-related information
- Add value to interprofessional collaborative practice
- Improve continuity of care
- Contribute to more efficient and cost effective health systems

**P1-53. Addressing Conflict within the Healthcare Team is an Ethical Duty and Patient Safety Emergency**

- Sarah Shannon, University of Washington, Seattle, WA, USA

**Submitted abstract:**

**Background:** Errors in healthcare pose a significant danger to vulnerable people seeking care. The relationship between errors and communication failures is established. These communication failures go beyond simple misunderstandings to include conflicts among members of the healthcare team, or between teams, that threaten patient access, quality care, treatment effectiveness, cost of care and satisfaction with healthcare (IHI Triple Aim). Yet, conflict in healthcare tends to be simplistic and organizations often champion particular strategies that are useful in some types of conflict but contraindicated in others. A more nuanced and effective view of conflict is needed to solve the communication challenges that contribute to medical errors across the world.

**Objectives:** 1) Review the evidence for the relationship among types of conflict and outcomes including health care errors, patient satisfaction, staff morale and organizational outcomes; 2) contrast theories and existing and posited strategies for addressing conflict; and 3) analyze a taxonomy for conflict combined with recommendations for effective, evidence-based strategies for addressing different types of conflict in health care.

**Methods/Results:** Drawing on empirical research on patient safety and team functioning, and theoretical work from business, philosophy and the social sciences, taxonomy of conflict specific to health care was created. Task-based, person-based, and behavior-based conflict is compared and contrasted. Theory-driven conflict strategies will be discussed including some that are in widespread use, such as tools from the AHRQ TeamSTEPPS model, strategies that are recommended, such as the Joint Commission’s sentinel alert on behaviors that undermine a culture of safety, or strategies that are currently in testing. Pragmatic approaches are presented for teaching and implementing a more nuanced set of skills for addressing the taxonomy of conflict that exists in health care.

**Implications:** Errors in health care are a national emergency. Addressing conflict within health care teams is critical to improving patient safety and providing accessible, effective, and cost-effective care. Confronting the problem of conflict among members of the healthcare team is an ethical and policy mandate.

**Author Biographies**

Sarah E. Shannon is an Associate Professor in Biobehavioral Nursing and Health Systems and adjunct in Bioethics and Humanities at the University of Washington. She is also on the interprofessional ethics consult team for the University of Washington Medical Center. She teaches bioethics, communication
skills, conflict management, and error disclosure for nurses, physicians and other learners. She leads a subcommittee focused on implementing interprofessional education broadly across six health science schools.

P1-54. Veteran Evaluations of Military Relevant Outpatient Traumatic Brain Injury Rehabilitation by an Interprofessional Team

- Jean Nagelkerk, Grand Valley State University, Grand Rapids, MI, USA
- Jacobus Donders, Mary Free Bed Rehabilitation Hospital, Grand Rapids, MI, USA
- Jeff Trytko, Cancer & Hematology Centers of Western Michigan, Grand Rapids, MI, USA
- Lorraine Pearl-Kraus, Mary Free Bed Rehabilitation Hospital, Grand Rapids, MI, USA

Submitted abstract:

**Background:** Traumatic brain injury and Post-Traumatic Stress Disorder have been sustained by over 1,000 veterans in Michigan who served in Afghanistan and Iraq. To facilitate veteran access to community-based rehabilitation services expanding on those available through the Department of Veterans Affairs, Grand Valley State University and Mary Free Bed Rehabilitation Hospital (MFB) collaborated on an interprofessional research project funded by the Department of Defense. **Objectives:** The project’s goal was to use interprofessional treatment teams to enhance the education of veterans with traumatic brain injury and their families to foster outpatient rehabilitation and community reintegration.

**Methods:** Beginning September 2011, participants were chronologically assigned to experimental or control groups, with military relevant patient education as the intervention. 33 veterans participated. All received rehabilitation treatment, including baseline and post-intervention evaluations of outcomes. Duration of individualized treatment ranged from 14.9 to 58.4 weeks; median 31.0. Veterans completed a three-question program evaluation survey at conclusion of treatment: 1) What was most helpful to you? 2) What was the least helpful to you? 3) What should be changed?

**Results:** Twenty-two completed evaluations were returned. In response to the first question, with no prompting, nine mentioned specifically two or more health disciplines working together. Twelve used plural descriptions such as “staff”, “team”, or “MFB” to comment on their experiences working with an interprofessional team. Common themes for the “most helpful” question included personalized therapies and duration, seeing progress with their health, and access to gas gift cards to aid with transportation. Mentioned barriers included transportation difficulties, and scheduling appointments around school/work. Themes on suggested changes included adding group therapy sessions and after-hours appointments.

**Implications:** Participants reported overall satisfactory evaluations of their experiences receiving treatment from the interprofessional team. The three question narrative survey allowed flexibility for the patients to report on general experiences, mostly commenting on their primary therapy and team addressing specific needs/goals and fewer suggestions for improvement.

**Author Biographies**
Jean Nagelkerk, Ph. D., FNP-BC - As the Vice Provost for Health at Grand Valley State University Dr. Nagelkerk strengthens and expands partnerships and implements innovative initiatives in collaboration with local, regional, state and national organizations. Dr. Nagelkerk also leads the West Michigan Interprofessional Education Initiative, a regional inter-institutional interprofessional education and
practice initiative involving multiple organizations and disciplines. Dr. Nagelkerk serves as the principle investigator of the Veterans Traumatic Brain Injury Education Project.

Jacobus Donders, PhD is currently the chief psychologist at Mary Free Bed Rehabilitation Hospital. He is board certified by the American Board of Professional Psychology in both clinical neuropsychology and rehabilitation psychology. Dr. Donders main research interests include construct and criterion validity of neuropsychological test instruments and predication of outcome after traumatic brain injury.

Jeff Trytko, MS served as the Project Manager for the Veteran Traumatic Brain Injury Education Project. He received a Master of Science in Policy and Leadership from DePaul University. As a Clinical Research Coordinator, Mr. Trytko has contributed to several peer reviewed abstracts and publications. In 2010 he was awarded the Pediatric Emergency Care Applied Research Network- Research Coordinator of the Year.

P1-55. Testing an Interprofessional Collaborative Practice Model to Improve Obesity-related Health Outcomes with a Statewide Consortium

- Jean Nagelkerk, Grand Valley State University, Grand Rapids, MI, USA
- Ramona Ann Benkert, Wayne State University, Detroit, MI, USA
- Brenda Pawl, Grand Valley State University, Grand Rapids, MI, USA
- Amber Myers, Michigan Department of Community Health, Lansing, MI, USA

Submitted abstract:
Background: The Michigan Department of Community Health in partnership with Wayne State University, Grand Valley State University, Michigan Health Council (MHC), and Michigan Area Health Education Center (MI-AHEC), seek to strengthen the nursing workforce by pilot testing an existing model of Interprofessional Collaborative Practice (IPCP) for primary care health professionals. This is being done by implementing the West Michigan Interprofessional Education Initiative (WMIPEI) model. The three overarching goals of this study are: (1) Allow emergent nurse leaders to demonstrate IPCP leadership, (2) Incorporate training opportunities for nursing and other health professional students into the IPCP practice environment of two pilot clinics, and (3) Develop a long-term plan for the dissemination and sustainability of the IPCP clinic-based innovation through a statewide initiative to improve patient and population health outcomes.

Objectives:
1) Analyze components of an interprofessional collaborative practice model.
2) Conceive of the need for nurses to demonstrate interprofessional collaboration and leadership.
3) Demonstrate the sustainability of an interprofessional education and practice model.

Methods: To meet goal (1), each clinical site is conducting a thorough self-assessment on the identified health need and their current IPCP skills. Following this initial assessment, the interprofessional (IP) teams engage in IPCP skill-development. To meet goal (2), staff from both clinical sites model IP team behaviors to students, building a strong foundation for IPCP. The effect of the WMIPEI model on professionals’ perceptions is also being evaluated at this time using pre-post quizzes and the IP Perception Scale and the Entry Level IP questionnaire. Finally, to meet goal (3), a systematic outreach effort will be pursued through existing relationship infrastructures fostered by the MHC and MI-AHEC.

Results: Will be shared with prospective IPCP sites across Michigan.
**Implications:** We expect to improve and expand the use of IPCP in the state of Michigan.

**Author Biographies**
Jean Nagelkerk, PhD, FNP-BC - As the Vice Provost for Health at Grand Valley State University Dr. Nagelkerk strengthens and expands partnerships and implements innovative initiatives in collaboration with local, regional, state and national organizations. Dr. Nagelkerk also leads the West Michigan Interprofessional Education Initiative, a regional inter-institutional interprofessional education and practice initiative involving multiple organizations and disciplines. Dr. Nagelkerk serves as a Co-Evaluator for the interprofessional collaborative practice model study.

Ramona Benkert, PhD, ANP-BC is an Associate Professor at Wayne State University – College of Nursing. She has 23 years of clinical expertise as an Adult Nurse Practitioner with a current faculty practice at a nurse-run clinic in the Detroit Medical Center. Dr. Benkert’s research interests include; quality outcomes in primary care delivery, traditional and nurse-managed center models and perceptions of racism and mistrust in health care. She serves as a Co-Evaluator for the interprofessional collaborative practice model study.

Brenda Pawl, MSN, FNP-BC is the Director of Special Projects within the Office of the Vice Provost for Health at Grand Valley State University and the Project Director of the interprofessional collaborative practice model study. She is also a Family Nurse Practitioner with 30 years of health care experience. Mrs. Pawl’s areas of expertise include; interprofessional education, collaborative practice, women’s health and pain management.

**P1-56. Creating an Integrated Care Plan in Pediatric Rehabilitation**

- **Joanne Maxwell,** Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Keith Adamson,** Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Andrea Macdonald,** Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada

**Submitted abstract:**

**Background:** According to Accreditation Canada guidelines and the literature, an integrated care plan should facilitate care coordination, team communication & collaboration and demonstrate that the family is a primary partner in care coordination.

**Objectives:** At our facility, the implementation of an electronic health record across our outpatient areas in 2012 provided the basis on which we could build a new integrated care planning tool that could easily be accessed by staff from all different programs and services and enable the creation of a single plan of care for each child across the organization.

**Methods:** In 2013, an interprofessional team and family advisor developed and piloted an integrated care plan tool based on ‘priority areas’ identified by the client and family. The tool is designed to identify broader client/family priorities in such areas as Health and Safety, Mobility Accessibility, Communication, Family Strengths and Resources, and Transition. Identifying and documenting such priorities requires different skills than the traditional 'goals' of intervention usually noted in clinical documentation. Thus, training and education in solution-focused coaching and a strengths-based approach was provided to clinical staff in advance of implementation.
Results and implications: The Integrated Care Plan tool was implemented as a pilot in our neuromuscular outpatient clinic in the fall of 2013. Following an evaluation of this pilot and ongoing improvements to the tool, the integrated electronic care plan will be implemented in additional services across the organization to facilitate collaborative and coordinated decision-making based around client and family priorities. Experiences of the development of the tool and findings of the evaluation will be discussed.

Author Biographies
Joanne Maxwell, MSc, BScOT, Project Manager, Collaborative Practice at Holland Bloorview Kids Rehabilitation Hospital. Joanne has lead the implementation of the Electronic Health Record across ambulatory care areas and coincident review of clinical documentation since 2010. The vision of creating an electronic single plan of care was identified in 2010. As co-lead for the project, Joanne has been actively involved in the development and implementation of the tool and processes.

Dr. Keith Adamson is PhD is Senior Director, Collaborative Practice at Holland Bloorview Kids Rehabilitation Hospital. A strong advocate of interprofessional care and practice, Keith has provided senior leadership around the development of Electronic Health Record since 2010. Keith is a member of the Integrated Care Plan Steering Committee.

Andrea Macdonald M.S., MBA, is an Operations Manager at Holland Bloorview Kids Rehabilitation Hospital. Andrea has over 20 years of experience as a clinician and manager, and has been involved with a number of formal and involvement initiatives around the development of care plans with families and interprofessional teams. As co-lead for the project, Andrea has been actively involved in the development and implementation of the tool and processes.

P1-57. Interprofessional Practice in Qatar: Transformative Governance Structures to Improve Collaboration

- Fatima Mustafa, Hamad Medical Corporation, Doha, Qatar
- Nicole Thomson, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- Jackie Schleifer Taylor, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- Keith Adamson, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada

Submitted abstract:
Background: The international nature of working interprofessionally and implementing collaborative practice in global communities is gaining more attention. A multi-year partnership between Hamad Medical Corporation (Qatar) and SickKids International/Holland Bloorview Kids Rehabilitation Hospital (Canada) provided the opportunity for the co-creation and implementation of a practice structure that supported interprofessional practice and collaboration within the context of a pediatric rehabilitation setting in the Middle East. A professional practice structure otherwise known as a clinical governance model was built to support the cultivation of interprofessional collaborative relationships at a systems level. This presentation will address the journey and collaboration in the construction of the new model, as well as speak to components of the model that were favorable to the development and nurturing of interprofessional practice.

Objectives: The primary objective of the project was to co-create a clinical governance structure that would support strong intra-professional ties as well as collaborative partnerships across various professions within the context of pediatric rehabilitation. Key components of the clinical governance
structure will be presented as facilitators to shared decision-making, open and direct communication, role clarity, opportunities to bring consistency in practice within and between professions, and fostering collaborative practice.

**Methods:** A series of methods were used in the co-creation and implementation of the Clinical Governance structure including focus groups, facilitated conversation, and consensus-building. The process was iterative and grounded in collaborative partnerships.

**Results:** Preliminary results indicate that there is a positive impact on the relationships between leaders of different professions, as well as other benefits related to interprofessional practice.

**Implications:** For clinical governance to successfully support interprofessional practice there must be an openness to modify traditional models in light of the diversity of cultural contexts. The co-creation of new clinical governance structures through collaborative partnerships will ensure that models are culturally situated, relevant and meaningful.

**P1-58. An Action-Reflection Team Learning Approach bridging High Reliability Collaborative Practice and Interprofessional Education**

- Ellen Raboin, CareQuest Consulting, Danville, CA, USA
- Paul Uhlig, Kansas University School of Medicine-Wichita, Wichita, KS, USA

**Submitted abstract:**

**Background:** High reliability collaborative practice is exceptional team-based care with active engagement of patients and families. Interprofessional education (IPE) is any approach to learning that supports and fosters collaborative practice. There is a growing body of literature that describes “what” high-reliability collaborative practice and IPE are (or should be) like. Much less is known about “how” care teams can intentionally and successfully activate collaborative practice and IPE in their care environments. Our research focuses on how to build these capacities and resources through social processes.

**Objectives:** We offer insights from our experience and research in ways that encourage participants to experience how collaborative practice is built. By using a reflexive model, the workshop devotes attention to both ways of “measuring progress,” and ways of “making progress” through intentional practical activities.

**Methods:** The implementation of collaborative practice with active engagement of patients and families is context sensitive and is a local/contextual/relational achievement. Using the workshop as a model context, participants will use role-playing simulations and the Collaborative Care Toolkit to experience and reflect about team-based activities that activate collaborative care and support IPE. Participants will enact action-reflection learning cycles to explore the “what” and the “how” of exceptional team-based care.

**Results:** Participants will leave the session with a deeper understanding of collaborative care that actively engages patients and families, and how this care can be socially constructed. They will also take home insights and practical tools that can be used to implement collaborative practice, measure progress in the development of collaborative practice, and that can be used as teaching tools in IPE programs.
Author Biographies
PAUL UHLIG, MD, MPA, a cardiothoracic surgeon, is associate professor at the University of Kansas School of Medicine-Wichita and Executive Director of the Mid Continent Regional Center for Health Care Simulation. He is recognized for innovative practice and research in patient safety, high reliability health care teamwork, and interprofessional education. His research utilizes social science methods to study how health care practice culture can be intentionally transformed through collaborative approaches.

ELLEN RABOIN, PhD, MSOD, MBA, a researcher/consultant concerned with collaborative care, focuses on contextual resources and social processes. Her interests include patterns of interaction that build resources for care teams, patients and family members, and accelerated learning through simulations. Ellen is President of the Ronald McDonald House of San Francisco and Past-President of the Bay Area Organization Development Network. She holds a Doctorate in Human and Organization Systems and a Masters in Organization Development.

P1-59. Forging the Foundation for a Collaboration-ready Health Workforce

- Amy E. Leaphart, Medical University of South Carolina, Charleston, SC, USA
- Kelly Ragucci, South Carolina College of Pharmacy, MUSC Campus, Charleston, SC, USA

Submitted abstract:
Background: Since 2009, over 2200 Medical University of South Carolina students have completed the required interprofessional course, IP710: Transforming Healthcare for the Future. The hybrid, mixed-mode course is designed so that students work though content while preparing a root-cause analysis of a sentinel event as an interprofessional team. Although the current course design and content areas are similar to the course that was first implemented in 2010, course feedback and evaluations have been used to provide direction for multiple minor and major course updates to lead to a course experience that is exemplary.

Objectives: This presentation’s objective is to describe how multiple feedback and evaluation sources have been used to guide course changes and to explain how analysis of qualitative and quantitative data assessed and analyzed post implementation of changes has lead to the most effective course design.

Methods: Qualitative and quantitative data from evaluation and feedback has been analyzed and processed from over 2200 student participants to trace a longitudinal, ongoing trajectory of course re-design meant to achieve specific results: students prepared to address the triple aim and function as part of a collaboration-ready health workforce.

Results/Implications: Although there is need to further expand IP efforts in clinical phases of education, success of interprofessional clinical practice is contingent on the establishment of a strong foundation of team approaches and awareness of the necessity for collaboration while providing care. The IP710: Transforming Healthcare for the Future course modifications illustrate the connection between course evaluations, re-design and clinically based objectives.

Author Biographies
Kelly R. Ragucci, PharmD, FCCP, BCPS, CDE received her Doctor of Pharmacy degree from the University of Toledo. Subsequently, she completed a clinical pharmacy residency in Family Medicine at MUSC. Kelly currently holds appointments as Professor in the Departments of Clinical Pharmacy and Outcomes Sciences and Family Medicine at MUSC. She is also the Chair of the Department of Clinical Pharmacy and
Outcomes Sciences. Her teaching and research interests include women’s health issues, interprofessional education and the scholarship of teaching.

Amy Leaphart, MA, MS is the Program Manager for the Office of Interprofessional Initiatives at the Medical University of South Carolina. She has an MA in English and Literature, an MS in Health and Exercise Science, and 15 years of experience teaching in the humanities, social sciences, and health professions education. Currently, she serves as the course director for IP710: Transforming Healthcare for the Future, the required interprofessional education course involving over 800 students per year.

P1-60. Evaluation of Interprofessional Team Disclosing Error to a Patient

- Kelly Ragucci, Medical University of South Carolina, Charleston, SC, USA
- Donna Kern, Medical University of South Carolina, Charleston, SC, USA
- Sarah Shrader, University of Kansas, Lawrence, KS, USA

Submitted abstract:
Background: For two years in a row, students from four different health professions (medicine, pharmacy, nursing and physician assistants) were involved in a simulation session related to a patient who suffered a gastrointestinal bleed. There was a medication error that occurred as part of the case.

Methods: Students were anonymously evaluated post-session on how well they handled the disclosure of the error to the patient and/or family members via a "Faculty Evaluation of Interprofessional Team Disclosing Error to a Patient" form. Students also provided anonymous feedback and self-reflected on their abilities via a Likert-scale evaluation tool, "IP Medical Error Disclosure Survey to Students". A comparison of students who completed a uniform interprofessional curriculum and training session (active group) versus those who did not (control group) was completed and is currently being analyzed as well.

Results: The data shows that the majority of students (95%) felt that they had adequate training related to communication issues that cause medication errors. However, less felt comfortable with communicating errors to patients (65%). Interestingly, nursing and physician assistant students felt the most comfortable with reporting a medication error that they or a colleague made compared to the other health-care professions students. Faculty tended to score student teams higher than the individual students ranked themselves.

Conclusion: This data confirms the need to devote more time within health-care curricula to training students on communicating with patients about the occurrence of a medication error and how to report that error to supervisors.

P1-61. Using simulation to enhance the use of the electronic health record in collaborative clinical practice

- Joanne Maxwell, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- Kim Krog, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- Darlene Hubley, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- Nicole Thomson, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
Submitted abstract:

**Description:** To support the implementation of an Electronic Health Record, a comprehensive interprofessional education plan was developed using different teaching methods including simulation. This blended learning model, aligned with a change management plan, supported a successful EHR implementation.

**Background:** Collaboration in health care is facilitated through effective use of information and communication technology (CIHC, 2010). The electronic health record (EHR) can be a catalyst to improve collaboration, yet clinicians struggle to integrate their use of the EHR into everyday practice. A recent EHR implementation at Holland Bloorview Kids Rehabilitation Hospital provided an opportunity to collaboratively create and employ a blended learning model to improve clinicians’ skills with technology and the EHR. Simulation was used as one learning tool. Simulation is often used in developing clinical skills, but novel in its application to developing skills related to the EHR. For this project, an interprofessional documentation change team utilized change theory, best practice in education and key themes from the literature regarding EHR implementation (Shachak & Reis, 2009).

**Objectives:** To utilize a blended learning model including simulation to develop clinician interest, confidence and competence in documentation in the EHR at the point of care.

**Methods:** An education strategy to optimize the use of the EHR was implemented. A blended learning approach included the development of electronic learning modules, in class sessions and a “super-user” coaching process. Simulations enhanced the drop-in sessions and super-user training. In addition, two simulation scenarios were presented in large group formats to catalyze discussion and facilitate behaviour change.

**Results:** A survey measuring speed of adoption, utilization and proficiency (based on Prosci’s ROI of Change Management) was used to evaluate clinical adoption. Significant improvement was seen over the course of evaluation. Simulation was viewed as a positive education tool as it encouraged engagement and stimulated discussion.

**Implication:** Organizations using a change framework partnered with blended learning methods will have success in helping staff adapt to using technology within a client and family centred environment. Simulation can be a useful in supporting the adoption of the use of an EHR.

**Author Biographies**

Joanne Maxwell, MSc, BScOT, Project Manager, Collaborative Practice at Holland Bloorview Kids Rehabilitation Hospital. Joanne leads the activities related to improvement and enhancement of the Electronic Health Record with a focus on change management and interprofessional collaboration.

Kim Krog, RN, BScN, MScN, CRN (C) is a Collaborative Practice Leader at Holland Bloorview Kids Rehabilitation Hospital and has worked as pediatric nurse in acute care and rehab for 32 years. Kim completed her masters in Nursing in 2012. She holds a national certification in rehabilitation nursing and is secretary of Ontario Association of Rehab Nurses. Kim has a passion for knowledge translation and was project leader for Holland Bloorview’s best practice Spotlight Organization designation.

Darlene Hubley is the Interprofessional Education Leader at Holland Bloorview Kids Rehabilitation Hospital. She is passionate about creating meaningful interprofessional educational experiences for
learners and interested in exploring simulation as a method to enhance interprofessional communication and collaboration.

Nicole Thomson, PhD(c), OT Reg. (Ont.). Nicole is a Collaborative Practice Leader at Holland Bloorview Kids Rehabilitation Hospital. Nicole is a doctoral candidate in the Graduate Department of Rehabilitation Science at University of Toronto. Her research is focused on improving health services for marginalized populations, specifically focused on 'disability' as a minority group in society.

Margaret Burns, IS Specialist. Margaret is an OT by background and led the development of elearning modules as well as the super-user training sessions which included simulation. Margaret provides unique insight into both clinical and technical aspects of tool development and implementation.

Sean Peacocke, MHSc (C), SL-P. Sean championed the use of simulation to support the use of technology at the point of care and was actively involved in the development and delivery of education related to the EHR implementation

**P1-62. Enhancing collaborative care by developing and delivering client and family centered care simulations**

- **Darlene Hubley**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Laura Williams**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Kathryn Parker**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada

**Submitted abstract:**
Client and family-centred care (cfcc) is a key value at Holland Bloorview Kids Rehabilitation Hospital and a core domain of the Canadian International Health Collaborative National Interprofessional Competency Framework (CIHC, 2010). The department of Client and Family Integrated Care and the Teaching and Learning Institute partnered together to build an educational innovation for the purpose of integrating the practice of four core family-centred principles (dignity & respect, collaboration, participation and information sharing) into the fabric of the organization. Learning objectives and behaviour statements were generated through an in-depth literature review of best practices.

We engaged in a day-long, co-creative process with 32 members of our community including representation from the professional groups, administration, management, students, and most importantly, family leaders (parents) to collectively build simulation scenarios mapping on to these principles. We then partnered with the Standardized Patient Program of the University of Toronto to further develop and deliver 4 simulation scenarios. The scenarios have become instrumental educational tools for teaching client and family-centred care for the broader system and have been seamlessly interwoven into the organization’s interprofessional orientation for new staff.

This presentation will describe the process of developing the cfcc behavioural indicators and outline the simulation development and delivery. Challenges and opportunities to the use of simulation for advancement of cfcc and collaborative care in any organization will be discussed.

**Author Biographies**
Laura Williams, MSW, RSW, Director, Client and Family Integrated Care, has worked extensively in new program development and process improvement in healthcare using these experiences most recently to enhance client and family-centred care at Holland Bloorview Kids Rehabilitation Hospital. As a clinical
social worker, Laura ran workshops in communication skills, family therapy and family dynamics in adult mental health. Her move into pediatrics took place shortly after her son, who has chronic illness and disability, became a frequent user of the healthcare system. Laura brings her professional expertise and personal experience to the table.

Kathryn Parker, PhD, Director, Teaching and Learning Institute, began working in the area of theory-based program evaluation in 2002. She has worked with numerous academic groups to facilitate and direct program evaluation efforts including the Department of Family and Community Medicine at the University of Toronto, Centennial College, George Brown College, and the Michener Institute where she served for seven years as the Senior Director, Scholarship, Assessment and Evaluation. She has a keen interest in the construction and measurement of program performance and outcome indicators as well as evolving the practice of theory-based program evaluations. Kathryn holds a PhD from OISE, University of Toronto.

Darlene Hubley, MScCH, BScOT, IPE Leader, is the Interprofessional Education Leader at Holland Bloorview Kids Rehabilitation Hospital. She is passionate about creating meaningful interprofessional educational experiences for learners and interested in exploring simulation as a method to enhance interprofessional communication and collaboration. She is a graduate of the Education Scholars Program and recently completed a Master of Science degree in Community Health with a focus on education in the health care environment. She enjoys meeting children, youth and families in her clinical role as an occupational therapist at Holland Bloorview Kids Rehabilitation Hospital and is a lecturer in the Department of Occupational Science and Occupational Therapy at the University of Toronto.

P1-63. Creating a Co-Managed Obstetrical/ Intensive Care Unit

- Linda Dudas, Magee Women’s Hospital of UPMC, Pittsburgh, PA, USA

Submitted abstract:

**Purpose for the program:** The critically ill pregnant woman presents a complex challenge to physicians and nurses in both obstetric and critical care specialties. Statistics suggest the overall estimate of obstetrical patients that require critical care services is 1-3% across the United States each year. A multidisciplinary approach was taken to review the literature and create an environment where the complicated obstetrical patient can receive co-managed care in a large, university hospital birth center. The Key focus is to recognize complications of pregnancy, and preexisting disease in order to care for the critically ill patient who has the potential to develop a life threatening situation.

**Proposed change:** The literature has shown that the majority of intensive care admissions in the obstetrical patient are secondary to obstetrical complications including hypertensive disorders, respiratory failure, and preexisting diseases, warranting a higher level of care. A proposal was developed using a co-managed approach of obstetrical and critical care specialties to care for critically ill obstetrical patients within a 6 bed ICU licensed unit located in the birth center.

**Implementation, outcomes and evaluation:** A multidisciplinary team consisting of Obstetrical and Critical Care Nursing, Maternal Fetal Medicine and Critical Care Physicians, Anesthesia, Respiratory, Pharmacy, Infection Control, was established to improve the assessment and management of the complicated obstetrical patient. A change in culture and education was needed within the birth center,
as well as throughout the facility identifying this unit as the place where the complicated obstetrical patient would be cared for.

To implement the proposal, "OB Triggers" were developed, to guide staff in identifying those patients that would be transferred to the OB/ICU beds. A core team of nursing staff was established to take ownership of the unit, and have an increased education on the complications of pregnancy, and preexisting disease. Since the initiation of this project, an increase in the daily census of complicated patients per day in the 6 bed OB/ICU Unit has been demonstrated through cumulative statistics based on diagnosis coding. An increase in the amount of co-management opportunities also has been demonstrated based on admitting physician and consults.

**Implications for nursing practice:** The implementation of this project has helped staff to recognize the importance of ongoing assessment of each patient identifying complications of pregnancy that requires an increased level in their care. In addition, the project has given all members of the health care team tools for recognizing the need for co-managed care and implementing timely and well-coordinated interventions when faced with life-threatening and increasingly common complications.

**P1-64. The Interprofessional Cleft Palate-Craniofacial Team Model: Elements of Success**

- **Ellen Cohn**, University of Pittsburgh, School of Health and Rehabilitation Sciences, Pittsburgh, PA, USA
- **Mark P. Mooney**, University of Pittsburgh, School of Dental Medicine, Pittsburgh, PA, USA

**Submitted abstract:**

**Background:** Cleft palate is one of the most frequent of congenital abnormalities, occurring in approximately 1/750 live births. Clefting typically affects oral structure, dentition, speech, hearing, and feeding, and may be accompanied by a range of medical and psychosocial challenges. Recognizing that effective treatment depends upon a coordinated team approach, in 1938, orthodontist Herbert Kurtz Cooper Jr. organized the Lancaster Cleft Palate Clinic in Lancaster, PA, the first of its kind in the United States. Cooper initially brought together an orthodontist, prosthodontist, speech-language pathologist, radiologist, psychologist and pediatrician. By 1979, the team had grown to 50 members with disciplines such as otolaryngology, physical anthropology and anatomy, and genetics. Hundreds of cleft palate teams have replicated Cooper’s model; many now include nurse practitioners. With the advent of craniofacial surgery more disciplines were added: neurology, neurosurgery and neuro-ophthalmology.

**Objective:** This presentation identifies elements for success that have developed over the 75-year existence of cleft palate-craniofacial (CP/CF teams: 1) a patient/family centric mission; 2) inter-dependent clinical decision making; 3) an over-arching interprofessional organization that fosters team care; inter-/intra-team education and research; and, standards and guidelines development.

**Results:** The CP/CF model is fostered by a global interdisciplinary organization that promotes team based management as the standard of care for persons with clefting. The 65-year-old American Cleft-Palate-Craniofacial Association (ACPA) ([www.acpa-cpf.org](http://www.acpa-cpf.org)) is comprised of 2,500 member professionals in 30 disciplines from 65 countries. ACPA hosts educational meetings, publishes the Cleft Palate-Craniofacial Journal (often with coauthors from multiple disciplines), and hosts a member listserv. ACPA and an associated Cleft Palate Foundation created the Commission on Approval of Teams; and published standards to guide interdisciplinary care ([www.acpa-cpf.org/team_care](http://www.acpa-cpf.org/team_care)). An online curriculum provides inter-professional education concerning the roles of team-based disciplines.
Implications: Lessons learned from the CP/CF team exemplar can foster the success of other types of interprofessional teams.

Author Biographies
Ellen R. Cohn, PhD, ASHA Fellow, is Associate Dean for Instructional Development; Director (Interim), Rehabilitation Science Program; and Professor, Communication Sciences and Disorders, School of Health and Rehabilitation Sciences, University of Pittsburgh. She has appointments in Dentistry, Pharmacy, Regenerative Medicine and CTSI. Dr. Cohn is a Director of the American Telemedicine Association and a member of the American Cleft Palate-Craniofacial Association. She has co-authored of 5 books and numerous articles, chapters and presentations.

Mark P. Mooney, PhD. is Professor and Chair of the Department of Oral Biology, University of Pittsburgh with appointments in Anthropology, Plastic Surgery, Orthodontics, and Communication Sciences and Disorders. He is president of the American Cleft Palate-Craniofacial Association and was awarded the Distinguished Scientist Award in Craniofacial Biology from the International Association of Dental Research. Dr. Mooney is the author or co-author of over 350 peer reviewed papers, abstracts, book chapters, and books.

P1-65. Comparative Interprofessional Ethics Education: A Didactic Exemplar

- Ellen Cohn, University of Pittsburgh, School of Health and Rehabilitation Sciences, Pittsburgh, PA, USA

Submitted abstract:
Background: Graduate students in speech-language pathology are required to become knowledgeable about the Code of Ethics (COE) of the American Speech-Language Hearing Association (ASHA). Study of the COE’s development, attributes, violations, and enforcements enables future professionals to avoid or manage ethical conundrums.
Objective: This presentation describes a graduate level didactic module on interprofessional ethics. Students acquired knowledge of four professional codes of ethics, and critically compared and contrasted the codes.

Methods: The didactic sequence: 1. Students in a graduate level Professional Issues seminar independently studied the ASHA Code of Ethics; 2. Instructor presented a PowerPoint lecture; 3. Class discussed case studies. 4. Students wrote individual papers, comparing and contrasting the ASHA COE with the COE of two other professions. 5. Students self-selected into teams that paired the ASHA Code of Ethics with the COE of another profession, or, that focused on tele-ethics. Teams were provided with a template to construct a poster presentation.

Results: Two teams submitted proposals to the Pennsylvania Speech-Language Hearing Association: a comparative analysis of the Codes of Ethics for ASHA and the American Psychological Association; and a comparative analysis of how telehealth/telepractice is managed in the COEs of four professions (OT, PT, Psy, SLP/Aud). Conference submission via a blinded, peer-review process was a novel experience for the students. PSHA accepted both posters for presentation.

Implications: 1) Comparative analysis of Codes of Ethics familiarizes students with the ethos, professional cultures, and policies of their own and other professions. 2) Professional ethics provides
authentic opportunities for students to interact on inter-professional learning teams. 3) The construct of such didactic experiences presents collaborative opportunities for inter-professional faculty teams. 4) Barriers include scheduling and curricular space – overcome perhaps via protected “inter-professional time” and inter-professional courses.

**Author Biographies**
Ellen R. Cohn, PhD, ASHA Fellow, is Associate Dean for Instructional Development; Director (Interim), Rehabilitation Science Program; and Professor, Communication Sciences and Disorders, School of Health and Rehabilitation Sciences, University of Pittsburgh. She has appointments in Dentistry, Pharmacy, Regenerative Medicine and CTSI. She has co-authored 5 books and numerous articles, chapters, and presentations, and has taught Professional Issues classes for 15+ years.

**P1-66. Interprofessional Goal Setting in Rehabilitation: The Development and Implementation of a Process that Integrates the Team and the Client and Family**
- **Kim Bradley**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Shawna Wade**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Ana Dimambro**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Jeanette Schoon**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Keith Adamson**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada

**Submitted abstract:**
The client and family as a productive and authentic member of the interprofessional team is a very current and seminal concept in the provision of health care. As reported previously the interprofessional admissions process for inpatients at a paediatric rehabilitation hospital was reconfigured in the context of lack of redundancy for the client and mandated interprofessional collaboration in assessing client status and need (ATBHVI) The engagement of the family/client as a member of this team was also scripted from preadmission through to the Family Team Goal Plan (FTGP) meeting at the end of the five day, eleven profession admissions process. The FTGP meeting involves the co-creation of an Action Plan which identifies the family and client’s goals and priorities and details the role and commitment of the healthcare professionals and family members in realizing each goal. The Action Plan may include a profession-specific goal for therapy, if appropriate, but equally importantly it includes how all team members will be integrating the family and client’s priorities into the care they provide: how all professionals will be supporting a family goal even when the scope of the goal lies with another profession. The FTGP is documented on the electronic health record along with the profession-specific treatment plans. The FTGP is revised throughout the admission. The evolution of the FTGP process involved the identification of a shared treatment approach of strengths-based practice, a champion (Social Work) to help navigate the process for the family and a truly transdisciplinary approach to the sharing of assessment information and the realization of rehabilitation goals. Both qualitative and quantitative data on the implementation of the FTGP will be presented.

**P1-67. The Use of Simulation in Encouraging Interprofessional Practice**
- **Kim Bradley**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Nicole Thomson**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Kim Krog**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Joanne Maxwell**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- **Keith Adamson**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
Submitted abstract:
Simulation is an education tool that has been effectively used and amply demonstrated as efficacious in interprofessional education. Additionally the Collaborative Practice leadership team at a paediatric rehabilitation hospital has used simulation to address interprofessional practice concerns raised by health care clinicians. These issues have included topics such as identifying a common treatment approach on an inpatient interprofessional team, chairing a team meeting which includes family, using the computer for contemporaneous documentation during a treatment session or having a conversation about consent for treatment with a family. The use of simulation in the context of practice has not been about simulation as an education tool, but rather the use of simulation to explore and solve clinical challenges, allowing the right language to emerge for effectively managing difficult situations or identifying the barriers to clinicians being able to realize best practice. There is often not specific information or procedures that are being communicated as with simulation with interprofessional education, but rather simulation is an opportunity for experienced clinicians to explore challenges they have identified; to problem solve and to co-create the language and identify skills that are needed to address a particular practice challenges. Simulation, as used by the Collaborative Practice team, has addressed issues that are common to health care professionals in a hospital setting contributing to an emerging realization of shared practice among health care professions and professionals.

P1-68. Balanced Accountability in Interprofessional Practice and Team Based Care: Developing Standards of Care for Unregulated Professions

- Nancy Searl, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- John Koo, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada
- Kim Bradley, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada

Submitted abstract:
Background: An increasing variety of non-regulated healthcare professionals are now working within teams. New delivery models view teams to be essential in improving client access to care, making better use of human resources, and improving overall quality of care to clients and families. (Valuing Healthcare Teams, Pan – Canadian Planning Committee for Unregulated Health Workers, 2008) As unregulated professions move to further integration in team based care, issues continue to abound. Central to the conversation is the lack of standards for unregulated groups. Without standards of care, clarity around responsibilities, accountability and practice are lacking. Unregulated members of the health care team could be disadvantaged from their regulated colleagues since they may not be afforded the same layer of protection that the adherence to standards provides. The respectful and collegial understanding of each team member’s accountability may be weakened when standards of care are not in place. Blurring of roles may occur raising the imperative concern of client safety and optimal client care.

Objective: In 2011, a Collaborative Practice Service was established at Canada’s largest children’s rehabilitation hospital to create a practice environment where excellence in clinical care could thrive. It was apparent that a system needed to be in place to support the development of standards of care for all professionals, regulated or unregulated.

Method: Roles and structures were established to ensure that interprofessional learning ocur. This included Collaborative Practice Leaders, discipline specific monthly Practice Councils comprised of the 18 health care disciplines and a monthly Professional Advisory Committee with representatives from each Practice Council. A process for the development and review of standards of care was endorsed by
the Professional Advisory Committee. Education regarding the importance of standards and the process was delivered at Practice Council and Professional Advisory. Standards of Care became a standing item on the council and committee agendas. Standards were placed in a portal on the hospital wide intranet.

**Results:** An understanding of what can be expected of co-workers within a discipline and within the team has broadened. Each step of the process is transparent, supporting interprofessional collaboration and increasing understanding of roles.

**Implications:** Standards of Care are an important driver towards a fair and equitable balance of expectations and accountability between unregulated and regulated members of the healthcare team. Members are supported in their practice and viewed equally as valued members contributing to safe, quality care.

**P1-69. Interactions between physiotherapists and physiotherapy assistants in the private sector: results of a mixed methods study**

- **Kadidia Perreault**, Institut de Réadaptation en Déficience Physique de Québec, Centre for Interdisciplinary Research in Rehabilitation and Social Integration, Québec City, QC, Canada
- **Clermont E. Dionne**, URESP, Centre de Recherche FRQS du Centre Hospitalier Universitaire de Québec, Québec City, QC, Canada
- **Michelle Rossignol**, Institut National d’excellence en Santé et en Services Sociaux, Montréal, QC, Canada
- **Stéphane Poitras**, University of Ottawa, School of Rehabilitation Sciences, Faculty of Health Sciences, Ottawa, ON, Canada
- **Diane Morin**, Université de Lausanne, Institut Universitaire de Formation et de Recherche en Soins, Lausanne, Switzerland

**Submitted abstract:**

**Background:** Although interprofessional practices have been highly promoted in recent years, the actualization of such processes in private sector physiotherapy has received little attention. In the Canadian Province of Quebec, physiotherapists and physiotherapy assistants are two groups regulated by the same professional body. Knowledge is limited on the interactions between both groups, sometimes labeled as intra-professional, in private sector physiotherapy.

**Objective:** To examine physiotherapists’ perceptions on their interactions between physiotherapists and physiotherapy assistants in the private sector.

**Methods:** Data for this study were collected through a mixed-methods study. In the first qualitative part, 13 physiotherapists participated in a semi-structured interview. In the second quantitative part, 327 physiotherapists completed an online survey questionnaire (participation proportion=67.7%). Data were analyzed using qualitative content analysis, as well as quantitative descriptive and multivariate statistics.

**Results:** Most of the interviewed physiotherapists reported working with physiotherapy assistants within their workplace and described their interactions in positive terms. A few physiotherapists mentioned challenges when interacting with these providers, notably linked with the different regulations for both groups imposed by the professional body. Respectively 22.9 % and 22.3 % of survey respondents reported having daily and weekly interactions with physiotherapy assistants, while 33.3 % said they never had interactions with these providers. As for satisfaction regarding their interactions
with physiotherapy assistants, 24.2 % of physiotherapists were totally satisfied and 30.3 % were rather satisfied. The degree of satisfaction was also found to be one of the factors associated with the intensity of physiotherapists’ interprofessional practices.

**Implications:** The results of this study highlight the importance of interactions between physiotherapists and physiotherapy assistants in the private sector. Further research should examine interactions between physiotherapists and physiotherapy assistants, as perceived by the physiotherapy assistants. Obtaining the viewpoint of the physiotherapy assistants would provide complementary knowledge and help clarify targets for action.

**Author Biographies**
Kadija Perreault, PT, Ph.D., is Assistant Professor in the Physiotherapy Program, Department of Rehabilitation, in the Faculty of Medicine at Université Laval. Dr. Perreault completed a Ph.D. in Community Health at Université Laval, examining organizational models and interprofessional practices of private sector physiotherapists, using a mixed methods design. She teaches pain management and community health. Her research interests are in the organization of rehabilitation services and improving professional practices for people presenting pain.

P1-70. Factors associated with private sector physiotherapists’ intensity of interprofessional practices

- Kadija Perreault, Institut de Rédaction en Déficience Physique de Québec, Centre for Interdisciplinary Research in Rehabilitation and Social Integration, Québec City, QC, Canada
- Clermont E. Dionne, URESP, Centre de Recherche FRQS du Centre Hospitalier Universitaire de Québec, Québec City, QC, Canada
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- Stéphane Poitras, University of Ottawa, School of Rehabilitation Sciences, Faculty of Health Sciences, Ottawa, ON, Canada
- Diane Morin, Université de Lausanne, Institut Universitaire de Formation et de Recherche en Soins, Lausanne, Switzerland

Submitted abstract:
**Background:** Research looking at factors associated with involvement in interprofessional practices is lacking in rehabilitation sciences. Also, most studies in the rehabilitation field have focussed on interprofessional practices in rehabilitation centres or hospitals. Very little is known of such practices in the private sector. Gaining knowledge on the factors influencing physiotherapists’ interprofessional practices in this sector could help identify targets for action to improve these practices. Objective: To identify organizational and provider-level factors associated with the intensity of private sector physiotherapists’ interprofessional practices in the context of their interventions with adults with low back pain.

**Methods:** A randomly-selected sample of physiotherapists (participation proportion=67.7%) answered an online questionnaire, including the Intensity of Interprofessional Practices Questionnaire for private sector Physiotherapists (IIPQ-PT). The final 0-10 score on this 12-item instrument served as the outcome measure for conducting bivariate and multiple regression analyses.
Results: A sample of 327 physiotherapists (120 men, 207 women) with a mean age ± standard deviation (SD) of 37.3 ± 9.8 years completed the questionnaire. Variables associated with the intensity of interprofessional practices (mean ± SD= 6.7 ± 1.7) were related to physiotherapists’ type of clientele regarding coverage for services (i.e. private insurance vs others), frequency of participation in social activities with other providers, perceptions and beliefs regarding interprofessional practices, as well as model of organization, organizational vision regarding the importance of interprofessional practices and provision of practical physiotherapy training within the organization (total R2= 48.7 %).

Implications: The factors associated with the intensity of physiotherapists’ interprofessional practices were related to the physiotherapists’ themselves, as well as to the organizations where they work. Some of these factors represent potential targets for action to improve such practices when relevant. For example, increasing physiotherapists’ participation in social activities with other providers may be a way to influence the intensity of such practices.

Author Biographies
Kadija Perreault, PT, Ph.D., is Assistant Professor in the Physiotherapy Program, Department of Rehabilitation, in the Faculty of Medicine at Université Laval. Dr. Perreault completed a Ph.D. in Community Health at Université Laval, examining organizational models and interprofessional practices of private sector physiotherapists, using a mixed methods design. She teaches pain management and community health. Her research interests are in the organization of rehabilitation services and improving professional practices for people presenting pain.

P1-71. Interprofessional Collaboration for Medically Complex Children in a Non-traditional Setting

- Mary Lou Lebold, University of Pittsburgh, Pittsburgh, PA, USA

Submitted abstract:
Background: The Commission on Education of Health Professionals for the 21st Century promotes instructional re-design that enhances “collaborative and non-hierarchical relationships in effective teams” (2010, p. 1951). Interprofessional collaboration has been shown to enhance teamwork (Morey, 2002) while ‘situated learning’ proposes that knowledge is best learned in context (Martin, 2009).

Objectives: At the conclusion of the session, participants will be able to:
1. Describe how learning in context promotes interprofessional collaboration
2. Explain how to design a learning experience that promotes collaboration
3. Identify opportunities within their employment responsibilities

Methods: This session will present the systematic approach used to design an authentic educational experience for Master of Occupational Therapy (MOT) students with an interprofessional team - a supervising occupational therapist from the University of Pittsburgh and volunteer respiratory therapists, nurses and physicians from Children’s Hospital of Pittsburgh. Students completed a 6-day field experience at a residential camp designed for children who require ventilatory support.

Each student was responsible for maximizing one camper’s participation in activities of daily living and leisure for 15 hours/day. Respiratory therapists, nurses and physicians oversaw medical needs while the MOT students facilitated the children’s camp experience. Constant team collaboration was required to maximize safe participation of these medically complex children.
Results: Students learned: the expertise of each team member, to perform tasks such as gastrostomy tube feedings and suctioning taught by the team expert as well as when and how to collaborate confidently with the team. Team members learned the expertise of occupational therapists and realized the power of collaboration to create positive camper outcomes.

Implications: Supervised student learning experiences in context with an interprofessional healthcare team led to a positive outcome for all involved. Additional experiences can be designed to promote a collaboration ready healthcare workforce.

Author Biographies
Dr. Leibold is an Assistant Professor and is the Academic Fieldwork Educator in the Department of Occupational Therapy at the University of Pittsburgh. During her 20 years of clinical practice as an occupational therapist, she worked collaboratively with the health care team in acute care, rehabilitation, skilled nursing and outpatient settings. In her current employment as an academician, she prepares students to work collaboratively with the team during Fieldwork experiences and into employment.

P1-72. Exploring the barriers and strategies to interprofessional handover in the Aotearoa/New Zealand context.

- Kirk Reed, Auckland University of Technology, Auckland, New Zealand
- Anecita Gigi Lim, University of Auckland, Auckland, New Zealand

Submitted abstract:
Background: Interprofessional collaborative practice (CP) is recognised by the World Health Organization as a means to strengthen health systems and improve health outcomes. One of the fundamental aspects of CP is understanding and improving the working culture of practitioners and teams through communication strategies and shared decision making. Team members can only realise and truly gain insight into the importance of each other’s roles by working together with problems in the real world. Clinical handover is a universal procedure used by nurses and other professionals to communicate with each other, make decisions, and promote continuity of care and clinical management. Clinical handover has gained international attention through the World Health Organization’s Patient Safety programme. Numerous studies have found that poor clinical handover has resulted in wrong treatments, delays in diagnosis, adverse events and inadequate information transfer between health practitioners.

Objective: To describe a small scale study implemented in a range of ward settings of a large general medical hospital in New Zealand. The aim of the study was to identify barriers and strategies to interprofessional clinical handover and explore a framework for the clinical setting to enhance interprofessional clinical handover.

Methods: The study used a pre-post test design methodology with an intervention that provides a pre-designed training package to ward staff (medical, nursing, allied health and pharmacy). The pre and post test measures included; a survey of interprofessional team members related to interprofessional practice, practitioner’s job satisfaction and efficacy.
Results: Preliminary results from the study will be presented providing a comparison of the measures used. The key features of the framework that was developed will be disseminated. Implications: There is potential that these findings can lead to improvements in clinical handover and for the extension of the framework to guide interprofessional collaborative practice in a range of practice settings.

Author Biographies
Dr Kirk Reed – is an occupational therapy researcher and academic. He is Head of Occupational Science and Therapy at AUT University, Auckland, New Zealand and Director of the National Centre for Interprofessional Education and Collaborative Practice. Kirk has a strong interest in; exploring how teams can work collaboratively to improve client outcomes and in exploring occupational therapy outcomes in primary health care and mental health.

Dr Anecita Gigi Lim is a Senior Lecturer and nurse researcher and academic at the School of Nursing, University of Auckland, New Zealand. She is involved with the Applied Aging Research Group, coordinating the medication management section. Her research interests include; exploring nurses’ education needs in relation to medication management, pharmaco vigilance, safe drug administration and prescribing and the continuing education needs of prescribers (doctors, nurses, midwives).

P1-73. Wisdom of the area core hospital in a district that established an unique discharge planning—a qualitative analysis

- Mariko Zensho, Saitama Prefectural University, Koshigaya, Saitama, Japan
- Koji Sugano, Nagoya City University, Graduate School of Medical Sciences, Nagoya, Aichi, Japan
- Ryo Kubota, Saitama Prefectural University, Koshigaya, Saitama, Japan
- Hajime Toda, Kitasato University, Graduate School of Nursing, Sagamihara, Kanagawa, Japan

Submitted abstract:
Background: In Japan, it is worked on enhancements of home health care support system at a country level now. The improvement of reviewing the discharge planning (DP) that the area core hospital is one of the major challenges.

Objectives: This study did the area core hospital which caught the high evaluation from the country in the investigation field about integrated community care system. The purpose of this study was to clarify wisdom in the practice from the viewpoint of Interprofessional Collaboration which went DP.

Methods: Subjects were Medical Social Worker, Discharge Nurse, Home Care Nurse, and Certified Nurse Specialist. Interviewers were the author and two colleagues. Based on common theme of all of interview ("Practice problem about DP"), we made four interview guides in line with each specialty for subjects and performed semi structural individual interview. Data under voice was recorded, and word-for-word record was created. It was one hour per person (2012). Data analysis extracted and abstracted important contents from word-for-word record. Ethical considerations: Word of mouth and a document explained the research meaning and private information protection to the object. Consent was obtained by the signature.

Results: It was classified in four core categories and subcategories as follows.
- Staff training: The value formation for consultation, Informed consent, Comprehensive support
- System of the hospital: Decision-Making Process, Discussion of the bottom-up, Prospects for the future
• Practical importance: Support to transition from treatment to palliative care, Interprofessional work
• Act of residents of participating: Residents' evaluations of hospital, Resident awareness-raising activities of the end of life care

Conclusions: Our findings were suggested that the model district regarded for an improvement in quality of DP four points as follows; Staff training, System of the hospital, Practical importance, Act of residents of participating.

P1-74. Designing the Guidelines for Construction of the Collaborative Transition Care System between Hospital Staff and Home Care Staff

• Hiroko Kohara, University of Kochi, Kochi-shi, Japan
• Yasuko Morishita, University of Kochi, Kochi-shi, Japan
• Michiko Kawakami, University of Kochi, Kochi-shi, Japan
• Sachiko Morishita, University of Kochi, Kochi-shi, Japan

Submitted abstract:

Background: Considering the steady increase of national medical expenditure, each prefectures of Japan had been implementing the projects from 2009 to 2013, according to the governmental plan for local health care reconstruction furnished with the fund established for that purpose. In Kochi prefecture, a corresponding project is under way called the project for central-western region comprehensive collaborative system construction. The authors joined in the project to construct the ‘collaborative transition care system between hospital staff and home care staff’, appropriate for each size of the relevant municipals whose population ranges from thirty to fifty thousand.

Objectives: Designing the guidelines for construction of the collaborative transition care system between hospital staff and home care staff.

Methods: The data in each municipal regarding the system designing process was collected from the following sources: recorded minutes; interview with project members, patients and families; attitude survey of hospital workers. The data was qualitatively analyzed in terms of the events during the process.

Results: The following guidelines were developed: 1. Obtaining support for the project from hospitals, home care agencies and health care institutions in community, 2. Organizing representatives of the hospital, agencies into a project team, 3. Identifying the local problems in a transition care, 4. Sharing the problems on extended conferences of concerned people, 5. Producing a transition care program that contains the goals of each role of hospital staff and home care staff, 6. Evaluating the program through trials.

Implications: It seems that the guidelines enable the construction of supporting system for transition care which creates collaboration between hospital staff and home care staff. It is a problem in the future to maintain the motivation of the both side throughout the entire phases of the guidelines.

P1-75. Collaborative Practice between Hospital Staff and Homecare Staff during Transitional Care; A Case of Rural Area in Japan

• Hiroko Kohara, University of Kochi, Kochi-shi, Japan
Submitted abstract:

**Background**: It is essential to establish a system to provide support and continuous care for patients at suitable facilities after their discharge from hospital. Poorly coordinated care management at the time of discharge can be a cause for confusion for patients and their families. Differences in the focus of care and poor communication between hospital staff and homecare staff can cause insufficient care and mismanagement. The purpose of this study is to describe an attempt for collaborative practice between hospital staff and homecare staff for patients with complex medical conditions during transitional care.

**Methods**: This study was conducted at an acute patient hospital, 10 homecare supporting agencies, one community general support center, and a public health center in Tosa-city, Kochi, Japan. Representatives from the hospital, agencies, and researchers organized a project team, produced a collaborative transition care program, and evaluated the newly launched program through trials conducted from 2010 to 2012. The total of 102 pre-program and 172 post-program cases records were analyzed. Records were collected from places where patients were moved to after discharge in the pre- and post- programs to measure how efficiently hospital and homecare staff had made preparations to aid patients and their families. Records from interviews and meetings with hospital staff and homecare staff were analyzed using inductive analysis to find the changes in practice and relationships between them.

**Results and Implications**: It was found that the rate of patients’ returning home after discharge increased by 18.1 %, and that hospital staff and homecare staff had begun sharing information and other issues and had incorporated them into their plans. It was therefore concluded that this mutual understanding can reduce incongruence and increase efficiency during transitional care.

P1.76. Using Motivational Interviewing Techniques in Interprofessional Clinical Practice for Delivering Healthcare to Persons with Multiple Chronic Conditions

- **Susan Kimble**, University of Missouri-Kansas City, School of Nursing & Health Studies, Kansas City, MO, USA
- **Margaret Brommelsiek**, University of Missouri-Kansas City, School of Nursing & Health Studies, Kansas City, MO, USA
- **Jane Peterson**, University of Missouri-Kansas City, School of Nursing & Health Studies, Kansas City, MO, USA
- **Heather Gotham**, University of Missouri-Kansas City, School of Nursing & Health Studies, Kansas City, MO, USA

Submitted abstract:

**Background**: Interprofessional Clinical Practice (IPCP) teams comprised of graduate students from the University of Missouri-Kansas City Schools of Nursing & Health Studies, Dentistry, Pharmacy, and Social Work were provided pre-clinical rotation training sessions in interpersonal communication and motivational interviewing (MI) to enhance healthcare delivery to persons with multiple chronic conditions (MCC). Working in an urban community-based healthcare facility, the MCC addressed through this project are cardiovascular disease (hypertension, hyperlipidemia, coronary artery disease) and diabetes mellitus. These MCC conditions are significant among the medically underserved
population in urban Kansas City and prevalent among the primary care populations at the site in which the IPCP team provided clinical care.

**Objectives:**
1. Examine the role of MI into IPCP teams
2. Discuss how MI strategies can assist MCC patients in meeting healthcare goals
3. Apply MI intervention strategies into healthcare delivery

**Methods:** Eighteen students (5 Advanced Practice Nursing; 5 graduate Pharmacy; 5 Social Work; and 3 graduate Dentistry) worked as members of IPCP teams. Prior to placement in an urban clinic, the students participated in interpersonal communication sessions to improve team function and provider-patient interactions. Additionally, the students worked with a Motivational Interviewing (MI) consultant in order to facilitate use of MI strategies for delivering care to medically underserved patients with MCC. Standardized patients were utilized to provide students with valuable experiences in implementing MI strategies focusing on chronic diseases. This training provided students with the necessary skills to create person-centered partnerships with their patients and to explore how best to resolve issues of ambivalence concerning the management of the patient’s MCC. Two primary goals informed this project: improved patient and team communication; reduced fragmentation in healthcare delivery.

**Results:** Two primary evaluation methodologies informed success of this project: daily student reflections around specific questions tied to MCC and MI under the interprofessional categories of Value/Ethics and Interprofessional Communication; focus group questions addressed MI strategies in regard to working with MCC patients and how the IPCP team integrated these strategies into care delivery.

**Implications of Proposed Session:** Participants will learn how to employ concepts from MI techniques that can assist IPCP teams in delivering care to persons with MCC. Utilizing a case study format, participants will break into IPCP teams and develop strategies utilizing on MI for addressing behavioral issues regarding an MCC patient. At the close of this interactive session, participants will be able to apply MI techniques when treating individuals with MCC in order to improve healthcare outcomes.

**P1-77. What’s My Line? Blurring the Interprofessional Roles in Clinical Practice**

- **Susan Kimble,** University of Missouri-Kansas City, School of Nursing & Health Studies, Kansas City, MO, USA
- **Margaret Brommelsiek,** University of Missouri-Kansas City, School of Nursing & Health Studies, Kansas City, MO, USA
- **Heather Gotham,** University of Missouri-Kansas City, School of Nursing & Health Studies, Kansas City, MO, USA
- **Andrew Bzowyckyj,** University of Missouri-Kansas City, School of Pharmacy, Kansas City, MO, USA

**Submitted abstract:**
**Background:** The UMKC Bridging Disparities project developed interprofessional collaborative practice (IPCP) teams, led by a nurse practitioner, including advanced practice nursing, pharmacy, and dentistry students, at two urban clinics for the medically underserved. As part of the IPCP rotation, students learned the importance of designated roles and responsibilities, importance of clear and respectful communication among team members, and how each role is essential for improved patient outcomes.
**Objectives:**

1. Design innovative IP Clinical Care Teams
2. Identify similarities and differences in roles among the IP Clinical Care Team
3. Discuss ways strategies that assist with overcoming barriers to IP Clinical Practice
4. Utilize existing practice models in building IP Clinical Care Teams

**Methods:** Through the Bridging Disparities project students from nursing, dentistry, and pharmacy prepared for placement in two urban community clinics through a series of on-line modules around the IPE Core Competencies and working with vulnerable populations and through pre-rotation surveys to determine readiness and attitudes regarding IPCP. This IPCP teams, working in groups of at least two students provided primary care to actual patients, consulting with one another, then with their preceptor developed the patient centered care plan as a functioning IPCP team. A series of questions were developed for use during weekly patient huddles and case study presentations throughout the semester to course faculty, other student participants, preceptors and other clinical staff. Students maintained clinical logs documenting patients cared for, including diagnosis, multiple morbidities, plans of care, and reflections on cultural issues impacting care as well as reflections on participating as members of IPCP team. Activities were integrated that enhance roles and included different professions to the IPCP team and expanded the content beyond that typically taught in a primary care program.

**Results:** Data was acquired regarding students’ attitudes and readiness about IPE through the Readiness for Interprofessional Learning Scale (pre-clinical), Interprofessional Collaboration Scale (post-clinical), Attitudes Toward Health Care Teams Scale (pre/post), Team Skills Scale (pre/post), Cultural Competence Assessment (pre/post), Focus groups of the participants were conducted at the end of each rotation. The data was analyzed between the pre/post test results. Student reflected on their experiences through daily journals which assisted them in better understanding themselves and their relationships with the other clinical team members and the patients during clinical rotations. Case study presentations and huddles provided in-depth analysis of the team care provided as measured against national practice guidelines.

**Implications of Proposed Session:** The ability to design innovative IP Clinical Care Teams while identifying similarities and differences in the roles of the IPCP teams is essential. The discussion of the strategies addressing the barriers to IPCP teams may inform future practice among IPCP teams. Existing practice models were utilized to develop the IPCP team which will be sustainable within the medical home model of care.

**Author Biographies**

Susan Kimble, DNP, is a Clinical Associate Professor and MSN and DNP programs director. She is the project investigator of an advanced practice nursing (APN) Interprofessional Collaborative Practice (IPCP) grant, and the Curriculum Director of another IPCP grant focused on the medically underserved with multiple chronic conditions. Susan teaches DNP coursework and advises DNP student projects. Susan maintains an internal medicine practice along with her research focus of improving healthy lifestyles in urban community sites.

Margaret Brommelsiek, PhD has extensive experience developing interdisciplinary and interprofessional programs and curricula connecting the arts with the life sciences. As the Director of Interprofessional Education, she has taught interdisciplinary courses in the School of Medicine’s Medical Humanities program and in the College of Arts and Sciences. Brommelsiek is the Project Director on an HRSA-funded
IPE ANEP grant and as a faculty consultant on an IPE NEPQR grant, along with developing a humanities-based IPE program.

Heather J. Gotham, PhD, is an Associate Research Professor within the Collaborative for Excellence in Behavioral Health Research and Practice at UMKC’s SoNHS. Dr. Gotham’s research focuses on implementation of evidence-based behavioral health treatments and assessments for adolescents and adults, Screening, Brief Intervention, and Referral to Treatment (SBIRT), and treatment fidelity for co-occurring mental health and substance use disorders. She also studies interprofessional education and other nursing education initiatives.

Andrew Bzowyckyj, PharmD, received his degree from the University of Connecticut, completing a two-year residency specializing in ambulatory care practice, chronic disease state management, academia and policy with the University of Minnesota. He is a clinical assistant professor at the UMKC School of Pharmacy, practicing at The Diabetes Center at Truman Medical Centers where he provides medication management for patients with chronic metabolic conditions. He provides clinical supervision for pharmacy students on the IPCP grant.

Obie Austin, MSN, RN, FNP-BC, is an Adult/Family Nurse Practitioner with experience in General Health Care, focusing on urban underserved communities, in addition to his faculty and military nursing experience. He is faculty and a clinical preceptor to students in the IPCP nurse leadership grant, along with the IPCP grant focused on the medically underserved with multiple chronic conditions.

Martha Lofgreen, MSN, RN, WHNP, is the lead faculty for the Women’s health track along with providing primary care to underserved women in a local clinic. Besides teaching the clinical courses in the women’s health track, she is faculty to the students in the IPCP nurse leadership grant in two urban clinics. Martha is assisting to develop the graduate curriculum infusing SBIRT in all NP tracks at the University.

P1-78. Self Management Support for Diabetic Patients at the Birmingham Free Clinic

- Sudipta Mohanty, University of Pittsburgh, School of Medicine, Pittsburgh, PA, USA
- Lauren Jonkman, University of Pittsburgh, School of Pharmacy, Pittsburgh, PA, USA
- Mary Herbert, Birmingham Free Clinic, Pittsburgh, PA, USA
- Thuy Bui, UPMC Montefiore, Division of Internal Medicine, Pittsburgh, PA, USA

Submitted abstract:

**Background:** Self management support (SMS) programs have shown great promise in improving patient self-management of chronic diseases through the utilization of various technologically sophisticated communication tools. However, its applicability in low-income communities is questionable because of less access to such tools.

**Objective:** This project aims to evaluate the feasibility of a phone-based SMS program for underserved diabetic patients seen at the Birmingham Free Clinic – a multidisciplinary primary care clinic providing free care to underserved patients in the greater Pittsburgh area.

**Methods:** Medical, pharmacy, and translational research students collaborated to survey clinic patients with type 2 diabetes on the following topics: current diabetic management, diabetes health literacy,
familiarity with cell phone use, reliability of cell phone communication, and interest in cell-phone based SMS programs. This survey was approved by the University of Pittsburgh Institutional Review Board.

**Results:** A total of 16 participants were interviewed from July to November 2013. Preliminary data show that participants express lack of knowledge and poor adherence to proper diet (44%), exercise (44%), and blood glucose checks (43%) as major barriers to diabetes control. Surveyed participants reported reliable basic cell phone service (81%) and strong interest in SMS (81%).

**Implications:** Results from survey data are being used to design a new SMS program that can be introduced to Birmingham and tailored to the specific needs of this patient population. This new SMS program will include dietary and behavioral guidance and reminders for clinic appointments and medication refills – all delivered through cell phone calls and texts. Two demonstrational sessions will be held, where patients can learn about the new SMS programs and be given instructional training. Patients will provide feedback during the sessions, and these findings will be reported.

**P1-79. Meeting the Needs of Older Adults across Healthcare Settings through Interprofessional Team-Based Care**

- **Lora Cox-Vance,** UPMC St. Margaret, Division of Geriatrics, Pittsburgh, PA, USA
- **Heather Sakely,** UPMC St. Margaret, Division of Geriatrics, Pittsburgh, PA, USA
- **Yvonne Littlejohn,** UPMC St. Margaret, Geriatric Care Centers, Pittsburgh, PA, USA
- **Henry Groff,** UPMC St. Margaret, Division of Geriatrics, Pittsburgh, PA, USA
- **Elaine Beck,** UPMC St. Margaret, Geriatric Care Centers, Pittsburgh, PA, USA

**Submitted abstract:**

**Background:** The world’s population is aging, in all regions of the world and a rate faster than has been previously described in human civilization. Older patients often experience medical comorbidity, complex medication regimens, limited psychosocial resources and multiple transitions across health care settings. Priority must be given to developing interprofessional team-based care models capable of addressing the complex healthcare needs of this vulnerable population.

Older adults may require care in settings including the office, acute care hospital, assisted living and nursing home facility. The best approach for maintaining physical and mental health, preventing drug therapy problems & mobilizing resources as older adults experience these health care transitions remains elusive. Individual providers are often unable to address these needs, resulting in fragmentation of care and, potentially, poor patient outcomes.

Team-based approaches to care that are convenient, timely, comprehensive, and patient/caregiver-focused have been described in numerous care models in patients of all ages. Models described in outpatient settings for older adults include Geriatric Evaluation and Management (GEM) clinics. Few models have focused on the care of older adults across the continuum of care settings.

Development of an interprofesssional team, capable of providing care to older adults as they transition across health care settings, is a novel and promising approach. This model ensures warm handoffs within the group of providers, decreases the risk for medication errors, and promotes higher quality of care for older adults.
**Objectives:** This presentation will introduce a novel interprofessional model of care for older, allow the audience to identify needs within their own practices and consider mechanisms to implement key components. The panel will walk participants through a patient episode which includes a transition of care, demonstrating the needs of the patient and how those needs are met by the interprofessional healthcare team. The intended target audience includes physicians, pharmacists, social workers, nurses, nurse practitioners, physician assistants, practice managers, and administrators.

**Methods:** This presentation will bring together select disciplines from the model’s interdisciplinary team, including a geriatrician, clinical pharmacy specialist in geriatrics, licensed clinical social worker, geriatric psychiatrist, and nurse practitioner to provide insights into their practice model and engage the audience.

**Results and Implications:** Participants will be able to identify challenges unique to providing care to older adults across care settings and how an interprofessional team-based approach can help overcome these challenges. Participants will create a working document identifying specific needs of their practices’ population, short-term and long-term practice improvement goals, and begin an action plan and list of collaborators to accomplish those goals.

**Author Biographies**

Lora Cox-Vance, MD, is a clinical geriatrician and Director of the UPMC St. Margaret Geriatric Medicine Fellowship in Pittsburgh, PA. She completed her geriatric medicine fellowship, faculty development fellowship, and family medicine residency at UPMC St. Margaret. Dr. Cox-Vance currently practices geriatric medicine in multiple care settings and is a member of the UPMC St. Margaret Geriatric Care Center interprofessional care team.

Heather Sakely, PharmD, BCPS is a clinical pharmacist with specialty geriatric medicine training, Director of Geriatric Pharmacotherapy & PGY2 Geriatric Pharmacy Residency, and member of the Geriatric Medicine Fellowship faculty at UPMC St. Margaret in Pittsburgh, PA. She completed her clinical pharmacy residency and faculty development fellowship at UPMC. St. Margaret. Dr. Sakely practices clinical pharmacotherapy in multiple care settings and is a member of the UPMC St. Margaret Geriatric Care Center interprofessional care team.

Henry Groff, MD is a geriatric psychiatrist and faculty within the UPMC St. Margaret Geriatric Medicine Fellowship in Pittsburgh, PA. He completed his psychiatry residency and geriatric psychiatry fellowships at The University of Pittsburgh Medical School. Dr. Groff has clinical geriatric psychiatry experience in multiple care settings and currently practices at the UPMC St. Margaret Geriatric Care Center where he is a member of the interprofessional care team.

Elaine Beck, MSN, CRNP, is a clinical nurse practitioner with the UPMC St. Margaret Geriatric Care Centers in Pittsburgh, PA where she is a member of the interprofessional care team. She obtained her BSN from the University of Colorado, MSN from the State University of StonyBrook and is certified as a nurse practitioner in family medicine. Mrs. Beck has clinical experience in family medicine and geriatric medicine across care settings.

Yvonne Littlejohn, MSW, LCSW, is a clinical social worker with the UPMC St. Margaret Geriatric Care Centers in Pittsburgh, PA where she is a member of the interprofessional care team. She obtained her social work degree from the University of Pittsburgh and MBA from Chatham University. Mrs. Littlejohn has clinical experience in both general and geriatric social work, individual and family therapy.
P1-80. Implementing Interprofessional Spine Care Pathways across Upstate NY

- Joel Stevans, University of Pittsburgh, Department of Physical Therapy, Pittsburgh, PA, USA
- Brian Justice, Excellus BlueCross BlueShield, Rochester, NY, USA
- Jamie E. Kerr, Excellus BlueCross BlueShield, Rochester, NY, USA
- Michael Schneider, University of Pittsburgh, Pittsburgh, PA, USA

Submitted abstract:

**Background:** Excellus Blue Cross/Blue Shield, headquartered in Rochester, NY, provides health insurance to more than 1.8 million members. The organization has recently initiated a community wide program to address the unnecessary suffering, disability and cost brought about by current disjointed spine care delivery systems. These ineffective treatment systems are being redesigned by implementing full spectrum, evidence-based spine care pathways which are guided by the relational coordination model. The existing clinical workforce is being retooled to produce an interprofessional cadre of providers (i.e., chiropractors, physical therapists) that will serve as the portal of entry for spine patients and are designated as ‘Primary Spine Practitioners’. These providers undergo comprehensive interprofessional education to ensure uniform management and consistent communication. Primary Care Providers are also being trained in pathway integration and “first touch” shared decision making. Interprofessional communication and care coordination is supported by process measures and a robust technology infrastructure.

**Objectives:** To impact the Triple Aim by 1) demonstrating high patient and provider satisfaction; 2) improving clinical processes and patient-centered outcomes (e.g., functional, psychosocial and quality of life measures); and 3) lower the spine-specific and total cost of care.

**Methods:** A mixed methods study designed was utilized. Patient and provider satisfaction was assessed using a mix of semi-structured interviews, surveys and focus groups. Estimates of care process, clinical outcomes, and medical episode costs are generated from our administrative databases using a pre-post study design.

**Results:** Data collection is underway and our preliminary findings reveal positive trends for all outcomes. At the time of the conference data collection will be complete and we will present data on provider, patient and community engagement as well clinical and cost outcomes.

**Implications:** Nationally, direct costs of spine care have gone up six to eight times over the last 20 years accompanied by an even more dramatic increase in indirect costs. A compelling argument could be made that spine management is most inefficient and ineffective area of health care. We are demonstrating that new models of interprofessional care and pathway training can effectively reverse this trend.

**Author Biographies**

Joel Stevans, DC, PhD(c) is postdoctoral fellow in Department of Physical Therapy at the University of Pittsburgh. He received his BS in Biochemistry from Cal Poly, SLO, CA, his Doctor of Chiropractic from the Los Angeles College of Chiropractic, Whittier, CA, and is currently a doctoral candidate in Rehabilitation Sciences at the University of Pittsburgh. His research focuses on implementation science, interprofessional care models, and health services research.
Brian D. Justice, DC is an Associate Medical Director for Excellus BlueCross BlueShield. In this role he is responsible for spine care pathway development. Prior to joining Excellus Dr. Justice spent 28 years in chiropractic practice in a variety of clinical settings. He has published and presented nationally on quality improvement, pathway development and optimal interdisciplinary spine care. Dr. Justice earned his BS in Psychology from Brockport State University and his Doctorate in Chiropractic from National University of Health Sciences.

Jamie E. Kerr, MD, MMA is Vice President and Chief Medical Officer for Excellus BlueCross BlueShield. She participates in the development and implementation of plan-wide utilization management projects. She received her medical degree from Northwestern University Medical School and completed her residency in internal medicine at the University of Rochester School of Medicine and Dentistry. She is a recipient of several awards including the Alpha Omega Alpha Honor Society and the Janet M. Glasgow Award of Achievement.

P1-81. Achieving the Right Care at the Right Time through Streamlined Care Coordination

- **Holly Lorenz**, UPMC, Pittsburgh, PA, USA

**Submitted abstract:**
Healthcare is becoming increasingly more complex, because of the fast pace of the hospital environment, more patients with more acute care needs, and the number of professionals and specialists involved in a patient’s care. Despite sincere, often heroic, efforts to deliver great care, process breakdowns still occur and result in dissatisfied patients, disillusioned caregivers, errors or omissions, and delays in meeting patient needs.

The aim of the project was to design a care coordination model to improve patient and staff satisfaction and quality of care. Baseline observations were conducted on a medicine unit and confirmed the gap between the vision and the reality. Current processes often left the patient and staff confused as to the plan of care. Staff visited patients independently, often sharing redundant or conflicting information. To address the issues, a rapid improvement event was held with 30 multidisciplinary staff to redesign how to deliver care. These staff designed a new care model and several new processes and tested them for 3 months.

The changes include:
- Daily multidisciplinary rounds with patients
- Team decision making, order entry during rounds
- Central role of bedside nurse
- Optimizing roles/delineating accountability
- Voice equity
- Task shifting to best roles
- Designated team “help chain” = Clinical Resource Specialist
- Teaching rounds
- Pharmacy support

The model was spread to 3 more medicine units and is being spread house wide.

**Project outcomes include:**
- HCAHPS communication with nurses: Range pre: 62.8-65.1; Post: 66.5-73.1
- HCAHPS communication with doctors: Range pre: 67.6-73.7; Post: 72.6-78.6
- HCAHPS discharge info: Range pre: 81.5-82.5; Post: 83.5-85.5
- Increase in staff rating communication among care team as good/very good: from 30% to 100%
- Increase in staff agreeing/strongly agreeing to sense of accomplishment and pride at end of day: from 69% to 82%
- Positive movement in readmission and LOS data as well

**Author Biographies**

Holly Lorenz, RN, MSN is the Chief Nursing Executive for UPMC and the Vice President of Patient Care Services and Chief Nursing Officer for UPMC Presbyterian. Ms. Lorenz has over 30 years of health care experience, 25 years of progressive leadership and executive positions. She has extensive experience in finance, operations management, patient safety, adjunct academic faculty roles, organizational development and transformational leadership.

Dr. Margaret E. Reidy is Senior Vice President for Medical Affairs at UPMC Presbyterian Shadyside Hospital and Associate Medical Director for Corporate Care Management for UPMC. Dr. Reidy is board certified in Physical Medicine and Rehabilitation. Her clinical practice specialized in rehabilitation of Traumatic Brain Injury, Neurosurgical and Transplant patients. She is a Clinical Assistant Professor in the Departments of Physical Medicine and Rehabilitation and Neurological Surgery at the University Of Pittsburgh School Of Medicine.

Dr. Franziska Jovin is the Medical Director of Clinical Inpatient Services at UPMC Presbyterian and a Clinical Associate Professor of Medicine. In her time at UPMC, she has assumed a leadership role in the development of a Hospitalist Program at UPMC Presbyterian/Montefiore. Her areas of interest are Development of the Inpatient Medical Services, Improved Physician Communication, and Development of Protocols and Pathways that Improve Inpatient Care.

**P1-82. Improving Health For At-Risk Rural Patients (IHARP): Medication Use Coordination**

- **Gary Matzke**, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- **Michael Czar**, Carilion New River Valley Medical Center, Christiansburg, VA, USA
- **William Lee**, Carilion Clinic, Roanoke, VA, USA

**Submitted abstract:**

**Background:** Coordination of care is needed across all elements of the medical neighborhood and is especially challenging at transitions of care, such as hospital discharge. Previous studies have found adverse drug events affect 11 to 17% of patients following discharge. Primary care providers and community pharmacists are handicapped when not informed of the patient’s medication care plan (MCP) and personal medication record (PMR).Objective: To improve quality of care through communication of MCPs and PMRs to primary care physicians, community pharmacists, and patients.

**Methods:** Carilion Clinic implemented a demonstration project to coordinate care between the acute, primary care, and community setting. An electronic health information (EHI) network was established across 5 hospitals, 20 primary care practices, 1 specialty clinic and 26 community pharmacies. The acute and primary care clinical pharmacists (PCCPs) share an electronic health record and access was provided to participating community pharmacists. Patients and community pharmacists were to receive a MCP and PMR at hospital discharge and after each PCCP appointment if changes were made in either.
Physicians were to be sent an updated MCP and PMR after PCCP appointments. Communications were tracked and quality improvement measures were planned and implemented as needed.

**Results:** During January to September 2013 a total of 635 patients were enrolled. MCPs and PMRs were routinely sent to community pharmacies following hospital discharge. Patients were provided a MCP after 48% of encounters through 6 months and 69% of encounters through 9 months. MCPs were sent to physicians after discharge and each PCCP visit if changes were made. Patients received a PMR after 65% and 80% of PCCP encounters through 6 and 9 months, respectively.

**Implications:** Patients and physicians had increased access to key medication information. A coordinated care network can serve as a foundation for the optimization of medication use.

**Author Biographies**
Gary R. Matzke, PharmD is Professor of Pharmacotherapy and Outcome Sciences at Virginia Commonwealth University where he serves as the director of pharmacy practice transformation initiatives. He received his bachelor’s degree in pharmacy from the University of Wisconsin and PharmD degree from the University of Minnesota. His research focuses on developing and implementing interdisciplinary practice models to improve patient access to quality and affordable health care and the evaluation of policy strategies to enhance public health outcomes.

William T. Lee, RPh, MS is the Principle Investigator on the Improving Health in at Risk Rural Patients (IHARP) Medicare Innovation Center grant awarded to Carilion Clinic. He is the System Pharmacy Director for Carilion Clinic. He received his BPharm from the University of Illinois and Masters of Healthcare Administration from Roosevelt University.

Michael J. Czar, RPh, PhD is the Pharmacy Site Manager at Carilion New River Valley Medical Center. He is the Project Coordinator on the Improving Health in at Risk Rural Patients (IHARP) Medicare Innovation Center grant awarded to Carilion Clinic. He received his BPharm from Philadelphia College of Pharmacy and Science and PhD in Pharmacology from the University of Michigan.

**P1-83. Improving Health For At-Risk Rural Patients (IHARP): Identification and Resolution of Medication Related Problems**

- **Leticia Moczygemba,** Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- **Andrea Pierce,** Virginia Commonwealth University, Richmond, VA, USA
- **Michael Czar,** Carilion New River Valley Medical Center, Christiansburg, VA, USA

**Submitted abstract:**
**Background:** Adverse drug reactions and other medication related problems (MRPs) are associated with significant societal costs due to drug-related morbidity and mortality. Structured approaches to identify and resolve these medication-related problems were proposed over 20 years ago. Their uptake has been limited and rarely applied across the continuum of care.

**Objective:** To identify MRPs in patients with multiple chronic diseases and to estimate the cost avoidance associated with the resolution of MRPs.
Methods: Five clinical pharmacists were integrated into 20 primary care and 1 specialty practice. Patients with 2 or more chronic conditions and taking 4 or more medications were assessed for MRPs at their transition from one of the participating hospitals and upon implementation of the new practice model in each clinic. A standardized patient assessment was utilized to identify MRPs at each patient encounter. The number and type of problems, recommended interventions, and the estimated cost avoidance (ECA) were documented in an electronic health record research application.

Results: A total of 1,509 MRPs were identified in 635 patients. The mean number of problems per patient was 2.38 ± 2.76 (Range 0 – 27). Noncompliance (36%), needs additional drug therapy (13%) adverse drug reaction (13%), and unnecessary drug therapy (11%) were the most common MRPs identified. The recommended intervention was accepted and the MRP resolved at the time of encounter for 58% of MRPs; 39% of MRPs needed additional follow-up to ascertain if the recommendation resulted in MRP resolution. The total ECA was $587,304; 22% of recommendations reduced drug product costs; 16% – avoided physician visit; 12% – avoided ER visit; 4% – avoided new prescription order; 1% – avoided hospital admission.

Implications: The addition of pharmacists to primary care practices can lead to the identification and resolution of MRPs in patients with chronic conditions and result in marked health care associated cost savings.

Author Biographies
Leticia R. Moczygemba, PharmD, PhD is an Assistant Professor, School of Pharmacy, Virginia Commonwealth University. Her research focuses on working with marginalized groups to improve medication-related health outcomes. She has developed and evaluated interdisciplinary care models to improve health outcomes using patient-centered strategies that facilitate self-management of chronic diseases. Dr. Moczygemba received her PharmD and PhD from The University of Texas in 2004 and 2008, respectively.

Andrea L. Pierce, PharmD is the current Pharmacy Practice Transformation Fellow at the Virginia Commonwealth University School of Pharmacy. She is currently working with faculty members on initiatives to develop and implement innovative care models to improve health outcomes and reduce costs. Dr. Pierce received her PharmD degree from the University of Illinois at Chicago in 2013.

Michael J. Czar, RPh, PhD is the Pharmacy Site Manager at Carilion New River Valley Medical Center. He is the Project Coordinator on the Improving Health in at Risk Rural Patients (IHARP) Medicare Innovation Center grant awarded to Carilion Clinic. He received his BPharm from Philadelphia College of Pharmacy and Science and PhD in Pharmacology from the University of Michigan.

P1-84. Care coordination: What does it really look like?
- Moshe Feldman, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- Leticia Moczygemba, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- Antoinette B. Coe, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
Submitted abstract:

**Objectives:** 1) Describe care coordination processes; 2) Describe team work process analysis approaches; 3) Describe how to use process mapping to identify opportunities for supporting care coordination.

**Background:** The need for care coordination skills is increasing as the use of team based care models continues to grow. Characterizing care coordination is difficult because it occurs within a complex, adaptive system where work processes vary widely and are unpredictable. Process mapping methods offer tools to describe care coordination processes and identify opportunities of need. The Richmond Health and Wellness Program for Older Adults (RHWP) is an interprofessional care coordination clinic and training site for medical, social work, pharmacy, and nursing students located in a federally subsidized apartment building. Novel methods of team task analysis were used to understand work processes at the RHWP.

**Methods:** Ethnographic observations and semi-structured interviews were conducted with faculty and students to describe care coordination activities, team member roles, information technology, and functional goal interdependencies. A team work process and cognitive task analysis were conducted to map workflows and identify areas of need to support care coordination.

**Results:** Students and faculty perform multiple roles to support care coordination and dynamically adapt roles depending on availability of other expertise and specific purpose of the resident visit. A qualitative analysis of interviews with care providers and health professions students will be presented. Systems based factors related to individual competencies, organizational factors, technology/tools, and shared goals associated with care coordination will be identified and recommendations to support care coordination will be presented.

**Implications:** Team work process mapping provides a viable approach for identifying care coordination processes and identifying areas of need at a community-based clinic. Care coordination processes and supporting technologies can be developed to support interprofessional care coordination and identify educational needs for students and care providers.

**Author Biographies**

Moshe Feldman, MS PhD is an Assistant Professor at the Virginia Commonwealth University School of Medicine and Assistant Director for Research and Evaluation at the Center for Human Simulation and Patient Safety. Dr. Feldman has 10 years of experience developing simulation based training and assessments for healthcare, military, industry, and workforce development. His current work focuses on quality improvement and human systems integration in support of patient safety.

Leticia R. Moczygemba, PhD, PharmD is an Assistant Professor, School of Pharmacy, Virginia Commonwealth University. Her research focuses on working with marginalized groups to improve medication-related health outcomes. She has developed and evaluated interdisciplinary care models to improve health outcomes using patient-centered strategies that facilitate self-management of chronic diseases. Dr. Moczygemba received her PharmD and PhD from The University of Texas in 2004 and 2008, respectively.

Antoinette B. Coe, PharmD is a doctoral graduate student in the Department of Pharmacotherapy and Outcomes Science at VCU School of Pharmacy and a graduate research assistant with the Office of Assessment and Evaluation Studies, VCU School of Medicine. She received her PharmD from VCU in
2009 and completed a Community Pharmacy Practice Residency with VCU School of Pharmacy in 2010. She is a 2013-2014 American Foundation for Pharmaceutical Education Pre-Doctoral Fellow in Pharmaceutical Science.

P1-85. The Richmond Health and Wellness Program (RHWP): Strategies for Successful Community Based Interprofessional Care

- Pamela L. Parsons, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- Patricia Slattum, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- Moshe Feldman, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- Kelechi C. Ogbonna, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA

Submitted abstract:

**Background:** Implementing a successful interprofessional community based program requires not just teamwork among students but collaborations among teams of project leaders, research faculty, clinical faculty, and community members. To provide a model for these collaborations, we applied the multi---team system (MTS) framework to the RHWP, an innovative interprofessional clinical and educational experience where student and clinical faculty teams provide chronic disease management and care coordination on---site to low---income older adults residing in senior housing facilities.

**Methods:** The quality of teamwork among and between clinical, research, and community teams will be measured by 1) Relationships: including collaboration and trust, and 2) Performance: including desired outcomes for participants, and the community. Team science strategies incorporated to date include mentoring of junior faculty and sharing credit for work, regularly scheduled meetings to review progress and establishing a point person to maintain communication and collaboration across teams and settings.

**Results:** Our MTS has evolved to include clinical, academic and community teams. The success and barriers will be measured for each of these teams within the context of larger project goals. To date, we have completed local and national corporate meetings to increase our understanding of the needs of the organization and to explore avenues for partnership. Meetings with residents provided a venue to determine person---centered needs. System barriers included establishing trust with the resident population, obtaining senior leadership support of curriculum redesign and implementing a new method of affiliate agreement for students requiring legal counsel review.

**Conclusion:** Evaluating the impact of a large-scale interprofessional clinical and educational project requires defining and assessing the different teams required to meet overall project goals. multi-team system model provides a framework for conducting this evaluation to improve overall performance and increase a project’s chance of success.

**Author Biographies**

Pamela Parsons , PhD, GNP---BC Dr. Parsons is an Assistant Professor and Nurse Practitioner within the Department of Internal Medicine and Affiliate faculty within the School of Nursing at Virginia Commonwealth University. She serves as project director for the RHWP. Dr. Parsons has expertise in program development targeting older adults and chronic disease management.
Patricia Slattum, PharmD, PhD Dr. Slattum is Professor and Director of the Geriatric Program at Virginia Commonwealth University School of Pharmacy. She has extensive leadership, research and program development experience related to medication usage and older adults.

Moshe Feldman PhD Dr. Moshe Feldman is an Assistant Professor at the Virginia Commonwealth University School of Medicine and Assistant Director for Research and Evaluation at the Center for Human Simulation and Patient Safety. Dr. Feldman has 10 years of experience developing simulation based training and assessments for healthcare, military, industry, and workforce development. His current work focuses on quality improvement and human systems integration in support of patient safety.

P1-86. Looking at Orientation through a New Lens: The Interprofessional Clinical Orientation Program at St. John’s Rehab

- Jennifer Shaffer, Sunnybrook Health Sciences Centre – St. John’s Rehab, Toronto, ON, Canada
- Susan Schneider, Sunnybrook Health Sciences Centre – St. John’s Rehab, Toronto, ON, Canada
- Siobhan Donaghy, Sunnybrook Health Sciences Centre – St. John’s Rehab, Toronto, ON, Canada

Submitted abstract:

**Background:** Prior to 2012, new clinical employees participated in a comprehensive orientation process that included corporate as well as profession and program-specific orientation. The professional practice leader (PPL) and/or clinical educator delivered clinically focused content to new staff within their profession. A review of the clinical orientation process revealed a significant amount of content overlap between the various professions.

**Objective:** Streamline the clinical orientation process to create efficiencies and eliminate duplication, all while fostering and modeling a culture of interprofessional collaboration.

**Methods:** In 2012, commonalities with respect to content across corporate, profession, and program specific orientation were mapped out. Common clinical topics included: documentation and goal setting, informed consent, incident reporting, infection prevention and control, safe lifts and transfers, and falls prevention. An interprofessional clinical orientation program was created around these content areas, ensuring that it aligned with corporate topics. A process to continue addressing profession and program specific orientation topics was also identified.

**Results:** New clinical employees now come together during their first week of orientation and learn with, from, and about each other in the context of these common clinical topic areas. Interprofessional collaboration is modeled through the shared delivery of content by leaders within the Professional Practice & Education team. Participants have responded positively to the content and interprofessional format of this program.

**Implications:** Interprofessional collaboration is modeled and learned as staff are engaged in a jointly-facilitated learning process from the outset of their employment. This program has also created an opportunity for increased efficiency, collaboration and satisfaction within the Professional Practice & Education team.
Author Biographies
Siobhan Donaghy, MSc(RS), BSc(OT), OT Reg(Ont.), is the Professional Practice Leader for Occupational Therapy at the St. John’s Rehab site, and a corporate Collaborative Practice Leader at Sunnybrook Health Sciences Centre in Toronto. She completed her Bachelor’s degree in Occupational Therapy at the University of Toronto and her Master’s degree in Rehabilitation Science at McMaster University in Ontario. She is an instructor at the University of Toronto in the department of Occupational Science and Occupational Therapy.

Susan Schneider, RN, MN has held nursing leadership positions in large academic hospitals and has been involved in the development and implementation of numerous quality improvement initiatives. She has taught in undergraduate nursing programs, focusing on clinical skills development. Susan obtained her nursing degree from McGill University and has a graduate degree in nursing from Ryerson University.

Jennifer Shaffer, PT, MSc(RS), BSc(PT), BSc is the Professional Practice Leader for Physiotherapy at the St. John’s Rehab site of Sunnybrook Health Sciences Centre in Toronto. She completed her Bachelor’s degree in physiotherapy at Western University and her Master’s degree in Rehabilitation Science at McMaster University. She is a Lecturer in the Department of Physical Therapy at the University of Toronto. Jennifer’s areas of clinical focus are in orthopaedics, trauma and burns.

P1-87. Collaborative Carrots: Leadership Strategies for Cultivating Interprofessional Collaboration through Recognition

- Siobhan Donaghy, Sunnybrook Health Sciences Centre – St. John’s Rehab, Toronto, ON, Canada
- Jennifer Shaffer, Sunnybrook Health Sciences Centre – St. John’s Rehab, Toronto, ON, Canada
- Gabrielle Bochynek, Sunnybrook Health Sciences Centre, Toronto, ON, Canada
- Katherine Nazimek, Sunnybrook Health Sciences Centre – St. John’s Rehab, Toronto, ON, Canada

Submitted abstract:
Background/Relevance: St. John’s Rehab, as one of 8 programs at Sunnybrook Health Sciences Centre, is actively engaged in a cultural renewal process grounded in the principles of interprofessional care (IPC). Its Quality of Work Life (QWL) committee is an interprofessional advisory body with the mandate of facilitating enhanced staff morale, productivity and quality of work life through the implementation of recognition strategies, occupational health & wellness programs, and staff education.

Methods: An evaluation of the QWL program with an anonymous staff survey identified the need for enhancements with the existing recognition program. A literature review and mapping exercise was conducted, comparing the foundational theories, principles, values and competencies related to the practices of both IPC and recognition. An educational program was developed and delivered to the leadership team, demonstrating links and practical strategies to cultivate IPC through the practice of recognition. Tool kits were created and provided for leaders to use with their teams, encouraging active engagement in the use of recognition strategies.

Results: Results of the survey demonstrated that staff valued health, wellness and corporate recognition programs, yet desired more acknowledgement and recognition of their daily work by their immediate manager. A literature review and mapping exercise revealed that the foundational principles of recognition, including goal setting, communication, trust and accountability, were seen to align with
those of IPC. It was identified that a culture of IPC could be effectively fostered through the practice of recognition.

Implications: The principles of interprofessional care can be effectively cultivated and accelerated through leadership competencies which utilize recognition strategies, thereby enhancing collaborative teamwork, QWL for staff and patient care. Recognition is identified as an important leadership practice to integrate into a culture of interprofessional care. Practical strategies can be utilized by leaders and teams to foster IPC through the practice of recognition.

Author Biographies
Siobhan Donaghy, MSc(RS), BSc(OT), OT Reg(Ont.), is the Professional / Collaborative Practice Leader for Occupational Therapy at Sunnybrook Health Sciences Centre – St. John’s Rehab in Toronto. She completed her Master’s degree in Rehabilitation Science from McMaster University, with a focus on interprofessional practice. She has been recognized for her excellence and leadership in practice and education, and is an instructor at the University of Toronto in the department of Occupational Science and Occupational Therapy.

Jennifer Shaffer, PT, MSc(RS), BSc(PT), BSc is the Professional Practice Leader for Physiotherapy at the St. John’s Rehab site of Sunnybrook Health Sciences Centre in Toronto. She completed her Bachelor’s degree in physiotherapy at Western University and her Master’s degree in Rehabilitation Science at McMaster University. She is a Lecturer in the Department of Physical Therapy at the University of Toronto. Jennifer’s areas of clinical focus are in orthopaedics, trauma and burns

P1-88. You Are Not Alone: Pediatric Palliative Care

- Kathryn Hayward, Dalhousie University, Halifax, NS, Canada
- Gerri Frager, Dalhousie University, Halifax, NS, Canada
- Robert Martell, IWK Health Centre, Halifax, NS, Canada

Submitted abstract:
Background: Pediatric palliative care embodies a whole philosophy of care that focuses on enhancing the quality of life for children and their families living with progressive, life-threatening illnesses. Many health care professionals report needing more information related to this field of practice. Bringing this topic to an Interprofessional forum provides students the opportunity to recognize that they will not be working in isolation when providing pediatric palliative care in their professional practice.

Objectives:
- Students gain an understanding of the importance of Interprofessional collaboration in the delivery of patient and family centred pediatric palliative care.
- Students will reflect on the values, beliefs, attitudes and scope of practice of their chosen profession while gaining an understanding of the shared values, beliefs, attitudes and overlapping scope of practice with the various health professions
- Through group work students develop enhanced skills in building Interprofessional relationships and maximizing team function.
- Students will gain an appreciation for the importance of shared leadership when working with families receiving palliative care
**Methods:** This Interprofessional Health Education opportunity provided students from different professions an opportunity to learn about pediatric palliative care from an award winning video, “Making Every Moment Count,” the IWK Pediatric Palliative Care team, a social worker and a family member who shared her personal story. This interactive evening event included both large and small group Interprofessional interaction and was offered both locally and by interactive teleconference. Through small group work and post event reflective journaling, students shared their values, beliefs and attitudes related to pediatric palliative care and explored how these changed as a result of the information shared.

**Results:** Journal feedback reflected a positive response to this event, with students sharing an increase in knowledge and understanding of pediatric palliative care from a patient and family perspective. Evaluation of the event was distributed electronically with results currently pending.

**Author Biographies**

Kathryn Hayward is a nurse and IBCLC. She teaches at Dalhousie University in a variety of courses retaining her primary passion for teaching in pediatrics and families-both in the classroom and in the clinical simulation laboratory. She also has the role of Coordinator of IPHE. In this role, she collaborates with other health professional schools and faculties, and the community, to develop, promote and facilitate IPHE events and learning opportunities for 800 plus nursing students.

**P1-89. GRIT: An Interprofessional Team Approach to Educating Medical Residents**

- **Rachelle Gajadhar,** Palmetto Health, Inc, Columbia, SC, USA
- **Maureen Dever-Bumba,** University of South Carolina, School of Medicine, Columbia, SC, USA

**Submitted abstract:**

Objective 1: Discuss the need for interprofessional team training for medical residents
Objective 2: Describe the development of the GRIT (Geriatric Resident Immersion Training) Program using an interprofessional group of facilitators
Objective 3: Describe opportunities, challenges and barriers to implementation of this twice annual program.

The geriatric population is continually expanding and expected to be greater than 70 million by 2030. As a result, the health care workforce is being challenged to meet this need. The Geriatric Resident Immersion Training (GRIT) Program (adapted from the CRIT Program) has utilized an interprofessional group of facilitators to highlight the importance of health care team for medical residents and other health care professions. The facilitators are volunteers who have been involved in the development of the program since its inception and retention of the facilitators has been high. Recruitment, facilitator training process and implementation of the program will be described. Medical resident confidence in utilizing the health care team on post program survey is higher. Lessons learned from this experience as well as the GRIT Program is certainly replicable at other academic institutions.

**P2-1. Knowledge Broker Driven Community Based Participatory Research - An Avenue for Improving Health Outcomes in Rural Areas**

- **Sara Hanks,** Health Sciences and Technology Academy, Morgantown, WV, USA
- **Ann Chester,** West Virginia University Health Sciences Center, Morgantown, WV, USA
- **Robert Branch,** University of Pittsburgh, Pittsburgh, PA, USA
- **Summer Kuhn,** Health Sciences and Technology Academy, Morgantown, WV, USA
Submitted abstract:
This 90 minute panel presentation falls under the theme: “Educational redesign to prepare a ‘collaboration ready’ healthcare workforce”. A key element for addressing health and educational disparities requires multi-directional flow of information sharing. We will discuss a novel community career track, the Clinical Research Knowledge Broker (CRKB) who partners with clinicians, scientists, public health workers and high school teachers to facilitate health and science information exchange between adolescents, their family members and communities.

Background: According to the NIH NCATS, Community Engagement needs to be an integral part of all types of research from bench to bedside to curbside. One of the biggest issues the nation deals with is health disparities and the costs associated with them. Models for addressing disparities and providing access to hard to reach and influence populations are needed. Models for engaging underserved community members in answering research questions relevant to disparities are needed.

The Health Sciences and Technology Academy (HSTA) will serve as a case study to discuss their use of CRKB in reaching underserved, rural populations in West Virginia to enrich health knowledge, encourage health advocacy, and recruit health care professionals. In this program 9th-12th grade youth engaged in Community Based Participatory Research work with CRKB to address health care problems relevant to their community. As a result, these students are excited and motivated to enter careers to improve the health care workforce in health sciences.

Objectives: To present a case study using CRKBs and Youth as the backbone of the HSTA program. This model merges educational and health care strategies in the training and the conducting of CBPR by adolescents in health science clubs for addressing health disparities in under-represented communities. It effectively engages health professionals with youth to address research solutions for problems of importance to these communities using obesity as a prototype locally relevant health topic.

Methods: A panel of 5 individuals representing different stakeholders will present the case study from their perspective. Discussion will be initiated with 3 key questions asked of the participants.

Results: Each attending member of the audience will:
• Understand the concept of CRKB
• Be able to conceptualize research questions that are feasible to address within the framework of the model
• Possibly walk away with a partner to engage in CBPR

Implications: The new career path of the CRKB adds value to programs attempting to apply health science information in medically underserved communities via health science clubs for youth. They are key to guiding and mentoring the science club to be able to conduct CBPR on locally self-selected relevant health care issues in the community; translate principles of complex health-science topics; and facilitate CBPR making it relevant and comprehensible to youth engaged in community research projects to improve lifestyles. They also provide support to science teachers who have not previously received training in health sciences or conducted CBPR. We speculate CRKBs may be more effective in helping alleviate disparities and improving health than traditional health care providers.
Target Audience; health care providers, public health workers, educators, administrators, adolescents, community
Author Biographies
Ann Chester is founder and director of the Health Sciences and Technology Academy (HSTA). As the director she builds community/campus networks across WV to address health disparities using Community Based Participatory Research (CBPR) as the format. Under her leadership, biomedical researchers and 80 high school teachers disseminate science education to 800 9th-12th grade students from medically underserved communities with the hope of improving health literacy and biomedical science education in under-served Appalachian populations.

Robert A Branch MD FRCP, Professor of Medicine, Pharmacology, Clinical Translational Research at the University of Pittsburgh is a Clinical Pharmacologist, with extensive experience in the conduct of clinical research studies in man. This experience has been translated to assist HSTA health science clubs acquire the training and skills for adolescent members in clubs, mentored by STEM high-school teachers to conduct bone-fide community-based participatory research on projects related to obesity within their families and communities.

P2-2. Information is Critical in End Stage Renal Disease Patient Care Transitions

- Shane Perry, Network Strategies & Innovations, Inc., Pittsburgh, PA, USA
- Mary Ann Webb, Network Strategies & Innovations, Inc., The Renal Network, Indianapolis, IN, USA
- Raynel Wilson, Network Strategies & Innovations, Inc., The Renal Network, Indianapolis, IN, USA

Submitted abstract:
Background: Obtaining information from hospitals in a timely manner after End Stage Renal Disease (ESRD) patients are discharged and return to the outpatient dialysis center has always been a major area of concern for dialysis providers. The absence of sound communication processes between care settings provided an opportunity for improvement.

Objectives: The goals of the project included-
- development and use of a care transitions form
- development of a sound process for communication, data collection and reporting

Methods: This project used evidence-based interventions to provide education and technical assistance to promote optimal patient-care management. A Focus Group was created, comprised of dialysis facilities representatives, local hospital staff, and quality improvement (QI) personnel. Utilizing their knowledge and expertise, the Focus Group identified barriers, recommended process improvements, and developed model forms. QI staff developed materials for the project, including: a care transitions form, a data collection form, an environmental scan, and a letter of invitation.

Results: The Focus Group developed a list of Care Transitions Change Concepts. The use of a hospital computer system to obtain information was identified as a best practice. Other best practices include direct communication with the nephrology office; using a care transition liaison; using a care transitions form; obtaining discharge summaries from the hospital; and telephoning hospital personnel directly.

Implications: Participating centers reported improved communication between the dialysis facility and hospital. This project raised awareness of the need for improved communication across healthcare settings to avoid complications, which is essential for patient safety. Gaining access to the hospital computer system was the best method to obtain information. Relying on the transmission of verbal or
written communication was less effective. Assisting facility management in obtaining access to the computer systems of the hospital would be ideal for improving patient outcomes during care transitions.

P2-3. Teams and Technology: Targeting Substance Use in Rural Populations using Interprofessional Collaborative Practice

- Kathy Puskar, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- Ann M. Mitchell, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- Susan Albrecht, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- Marie Fioravanti, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA

Submitted abstract:
**Background:** Social attitudes and stigma associated with the use of alcohol, tobacco and illicit drugs make substance abuse one of the most complex public health issues (Healthy People 2020). Health professionals must be skilled to identify, assess, and intervene to reduce the risks/effects of substance use.

**Objectives:** 1) Present an interprofessional practice model to educate rural healthcare teams and 2) Apply interprofessional practice to the health issue of substance use/misuse through the use of online technology.

**Methods:** Nurses, public health professionals, and behavioral health counselors formed a team creating an interprofessional practice model including eight online hours of substance use modules, interactive cases studies, dialogues with clinical patient cases, and focus groups. The intervention was aimed at administrators and practitioners in rural counties who were contacted and linked to the project to participate. Continuing education units were provided at no cost along with access to materials and other resources online. Survey data including participant demographics, knowledge change, alcohol and drug perceptions, and interprofessional learning outcomes are collected throughout the intervention.

**Results:** The first 30 enrolled participants in two counties included mostly female health professionals (77%) with a mean age of 43.6 identifying as mental health professionals (n=11); others include social workers, registered nurses, and peer specialists. The majority of participants work in federally qualified community health centers (11), hospitals (5) and addiction treatment centers (5). To address implementation issues of staff turnover/practitioner time limits, participants received email reminders and gift card incentives during interprofessional model. Data analysis is in progress.

**Implications:** By engaging with the model, practitioners are better able to provide team-based care for substance use. Linking health professionals in collaborative practice deconstructs substance use stereotypes and facilitates connections between fragmented healthcare sectors. Adapting to diverse professional needs is critical to intervention success.

P2-4. PAASSPORT: Primary care Advanced Access Study - Spreading the Practice and Optimizing interprofessional Resources and Treatment

- Deborah Kopansky-Giles, Canadian Memorial Chiropractic College/St. Michaels Hospital, Toronto, ON, Canada
- Yee-Ling Chang, St. Michael’s Hospital, Department of Family and Community Medicine, Toronto, ON, Canada
Submitted abstract:
Introduction: In the 2009 Commonwealth Fund survey, less than half of Canadians were able to access a healthcare provider (45%) the same or next day and 33% of Canadians waited 6 days or more to be seen by a primary care physician or nurse. An innovative approach to optimizing practice management, “open-access” or “advanced access” scheduling, has been proposed as a method to address provider access. Through improved access to one’s interprofessional (IP) health team, continuity of care has been shown to increase with a subsequent decrease in repeat demand for the provider. By combining the advanced access concept with IP collaboration we expect to observe an increase in healthcare access and improvement in patient clinical outcomes and satisfaction.

Aims: In the Department of Family and Community Medicine at St. Michael’s Hospital, a study team has been working to expand this model to IP health care providers including chiropractors and to evaluate the model of IP team-based advanced access. Objectives include evaluating the:

- Open access scheduling feasibility for all providers
- The ‘max-packing’ concept for patients requiring IP healthcare interventions (providing multiple services and providers on the same day)
- The impact of open access on patient satisfaction for both family physician and chiropractic provider practices

Methods: This mixed-methods project involves the implementation of open access to healthcare providers, both physicians and chiropractors, at the St. Michael’s Hospital Department of Family and Community Medicine. This involves the measurement of practice metrics of 3rd next available appointment (TNA) and appointment supply and demand. Patient satisfaction surveys were collected from patients in waiting rooms for both chiropractic and family physician practices. Focus groups were also conducted to gather provider perspectives (?)

Results: Preliminary results have indicated that open access scheduling has reduced the wait times for patients requiring rapid access to their provider and that it has shortened the time period for the 3rd NAA. Initial results have also indicated an improvement in both patient and provider satisfaction with this model of delivery.

Conclusions: Through the use of open access in interprofessional care, we envision significant benefits including: improved and timely access to health services, increased comprehensive healthcare and decreased healthcare resource use such as emergency and walk-in clinic care.

Author Biographies
Dr. Yee-Ling Chang is a family physician/clinician scientist in the Department of Family and Community Medicine (DFCM) at St. Michael’s Hospital, a teaching hospital for the University of Toronto. In addition to private practice, Dr. Chang is responsible for overseeing the Professional Development portfolio for all health providers in the department. Dr. Chang is on faculty at the University of Toronto, Faculty of Medicine, DFCM and supervises residents in the Family Medicine Residency Program.

Dr. Deborah Kopansky-Giles is a chiropractor/researcher on staff in the DFCM at St. Michael’s Hospital and is a Professor at the Canadian Memorial Chiropractic College. Dr. Kopansky-Giles coordinates the chiropractic program in the DFCM and co-leads the department’s Interprofessional Education Working Group as well leads work in interprofessional team development.
P2-5. Practice and Learn Together In Order to Work Together

- Kenneth Nord, SUS Malmo, ICU and preoperative care department, Malmo, Skane, Sweden
- Mats Johansson, SUS Malmo, ICU and preoperative care department, Malmo, Skane, Sweden
- Marianne Johansson, SUS Malmo, ICU and preoperative care department, Malmo, Skane, Sweden
- Linda Zara, SUS Malmo, ICU and preoperative care department, Malmo, Skane, Sweden

Submitted abstract:

**Background:** The operating department at Skånes University Hospital of Malmö Sweden has been tested since 2011-2014, developed and evaluated a new educational program for training and learning for students at advanced academical level and new employed staff. The training takes place in the perioperative care in the everyday operating program as it is planned at the department.

The program consists of three parts:

1. “Preparation in team” where the participants prepare and discuss the patient cases. Risk analysing and discuss a plan B for emergency situations.
2. “Teamtraining at the operatingroom” where they train to take care of the patient in the preoperative care and
3. “Reflection in group” where tutors and participants discuss what went well and what can be better. The patient selection is ASA 1-3 that undergoes elective urologic, obstetrics or surgical operation.

Interprofessional education, peer-learning and problembased learning is educational models that is used to achieve both theoretical and practical ability of team-collaboration, learning and development.

**Objectives:** Prepare the participants for their coming career, increase competence, collaboration ability and in long run ensure the patient safety more effectively.

**Methods:** So far the program has 64 anesthetist- and theater nurse students and two new junior physicians that are under training to become anesthetists participate. Each participant was given the opportunity to participate two- three times in the program. Internally evaluation at the department has been done with both participants and tutors. This year start evaluation by questionnaires consisted or 22 questions answered anonymously. Qualitative interview study at master one year level has been conducted 2012 with the title “Anesthetist nurse students experience a new model for pedagogical tutoring in the operating room.”

**Results:** All evaluation is so far consistent and all participants agree that this kind of team training is constructive in many ways for the participants and development and preparation for their coming career. To train and learn together have a higher value for learning than doing it alone. The constellation of two of each, anesthetist- and theaternurse students and a junior physician under training in the preparation meeting and combined with the permissive climate for the independent training in the operatingtheater creates learning possibilities like reflective and peer-learning in group. It stimulate to participant activated learning where the learning becomes the focus. This stimulates to increased ability in collaboration, peer-support, reflection and critical thinking in group and individually. It prepares the participant to a lifelong learning. Also increase understanding of the other team-members and their profession and task at hand.
Participants stated that the training was more meaningful and it increased independent training and enhanced learning. It showed that reflection and feedback gave both the group and the individual an enhanced learning and development in the ability to give and understand the complexity of perioperative care.

Financial cutdown and complete employment stop since program started has made it difficult to run it sufficiently. Both lack of time, money and possibility to make it work completely well.

**Implications:** As an inspiration for others to start similar educational project at their departments. To enhance team-collaboration, quality of patient care and patient safety.

**P2-6. What to do when there is no “evidence” - problem-solving that promotes and prepares collaborative interdisciplinary health-care teams**

- **Murray Maitland**, University of Washington, Seattle, WA, USA

**Submitted abstract:**
All professionals face barriers to attaining their health-care goals: engineers, nurses, architects, teachers and others. Across professional divides there are common problem-solving strategies even if the language is different. As a conglomerate of professionals working together, problem-solving strategies have varying degrees of completeness and complexity. In addition, mechanisms to facilitate cross-disciplinary problems-solving have varying degrees of integration into institutional culture.

Evidence-based Practice (EBP) has been promoted as a philosophy of literature synthesis, but EBP is not a complete problem-solving approach. According to published literature, systematic reviews do not provide enough information even for many common situations. EBP does not use any of the typical problem-solving mechanisms (such as the “divide and conquer approach”) that are relevant to health-care teams.

Interdisciplinary health-care teams should have versatile approaches that meet patient- or context-specific needs. Abstract problem-solving strategies can produce well-considered action plans using the “street smarts” of team members, including the patient.

Communication is a fundamental building block of effective teams. Explicit communication in the problem-solving context can facilitate mutual understanding across health-care team members using variety of communication, negotiation or facilitation tools.

Since health-care team members are bombarded with a multitude of problems, priorities need to be set based on need, as well as institutional and professional principles. Practicing the principles can promote more rapid resolution of day-to-day issues and can provide positive feedback, as well as promoting the development of collaboration-ready health-care teams.

Participants will apply problem-solving constructs through active learning strategies combined with self-reflection to facilitate knowledge and skill development. At the completion of the workshop the participants will be able to:
- Compare and contrast models of patient care with transdisciplinary models of problem-solving.
- Use concepts in transdisciplinary problem-solving during interdisciplinary communication strategies
• Identify processes in their current environments that exemplify generalized problem-solving strategies
• Develop a list of characteristics of health-care problems that are priorities for interdisciplinary collaboration
• Identify roadblocks to collaborative problem-solving and propose first-steps towards solutions

A typical problem-solving algorithm has about 14 steps not including all of the sub-issues that one might consider. Typically problem solving starts with awareness and ends with ongoing quality assurance measures. Since these algorithms often seem complicated and involved, group leaders can facilitate team mutual awareness and goal setting. Participants in this workshop can use the presented algorithm as a representative road-map for interdisciplinary team approaches to problem solving in combination with other process and goal oriented tools.

P2-7. Innovation in Primary Care Oral Health: Interprofessional Team Practice

• **Anthony Cahill**, University of New Mexico, School of Medicine, Albuquerque, NM, USA
• **Barbara Overman**, University of New Mexico, School of Nursing, Albuquerque, NM, USA
• **Christy Cogil**, University of New Mexico, School of Nursing, Albuquerque, NM, USA
• **Amy Pilley**, University of New Mexico, Health Sciences Center, Albuquerque, NM, USA

Submitted abstract:

**Background:** This paper describes the implementation of an interprofessional practice model integrating oral health in primary care in two primary care settings: a Community Health Center and a nurse-managed faculty practice. New Mexico ranks 49th in dentists per capita. Seventy-five percent of oral disease is estimated to occur in the least socio-economically advantaged 25% of the population. The three-year project is funded by the HRSA Division of Nursing (UD7 HP25045).

**Objectives:** The project objectives are:
• Applying core competencies for interprofessional collaborative practice in a multidisciplinary healthcare setting to create a collaborative practice culture;
• Improving the oral health of patients of the interprofessional practice by applying evidence-based interventions in prevention and risk assessment; and
• Educating the interprofessional health workforce through collaborative practice-based learning.

**Methods:** Using theoretical frameworks of effective team functioning (Anderson and West, 1998; West and Borril, 2006) and the diffusion of innovations, an interprofessional team of dentists, primary care providers, nurse practitioners and community health workers has designed a practice model to promote structured innovations that integrate oral health in primary care among rural, underserved populations. Innovations to date include protocols for risk stratification and management for caries (CAMBRA); integrated oral health and prenatal care; and integrated oral health and medical care for adults with diabetes.

**Results:** A longitudinal evaluation is gathering data in three areas: the creation of the inter-professional model supporting innovation including team climate; proximal and distal impact indicators of changes in oral and general health of patients; and cost implications of using an integrated model of oral health in primary care. The paper will present findings from these areas,
**Implications:** This project’s experience and findings can contribute to a reframing of oral health competencies among primary care providers and addressing oral health problems as chronic conditions, as well as promoting of conditions for innovation by inter-professional teams.

**Author Biographies**

Barbara Overman, PhD, MPH, MSN is Clinical Associate Professor at the University of New Mexico College of Nursing and Project Director of both the UNM College of Nursing’s Nurse Managed Practice and the Innovation in Primary Care in Oral Health: Inter-Professional Team Practice project serving disadvantaged populations. Dr. Overman is a PhD (1990) and MSN nurse-midwifery (1985) graduate of the University of Colorado Health Sciences Center and an MPH graduate of University of Pittsburgh (1979).

Peter Jensen, DDS, MS, MPH is Clinical Associate Professor in the Department of Dental Medicine and Director of the UNM Advanced Education in General Dentistry Residency program focused on underserved and medically complex population. Dr. Jensen is an architect and leader of the Innovation in Primary Care Oral Health: Inter-Professional Team Practice project. Dr. Jensen is a DDS graduate of University of Detroit (1979) and MPH graduate of University of Rochester (2006).

Anthony Cahill, Ph.D., is Director of the Division of Disability and Health Policy in the University of New Mexico School of Medicine and Professor in the School of Public Administration. He is the Evaluation Director of the Innovation in Primary Care Oral Health: Inter-Professional Team Practice project. He received his Ph.D. and MIPA in Public Policy from the University of Pittsburgh and Master of Arts in Teaching from Colgate University.

**P2-8. Effectively Moving Interprofessional Best Practice to the Bedside**

- **Tracey Das Gupta,** Sunnybrook Health Sciences Centre, Toronto, ON, Canada

**Submitted abstract:**

Sunnybrook Health Sciences Centre (SHSC) is making tremendous strides in effectively moving best practice to the bedside. This is happening as a result of the purposeful engagement, education and support staff receive to assume roles as influencers of practice at the local unit level.

SHSC is at the mid point of a 3 year contract with the Registered Nurses’ Association of Ontario (RNAO) to become a Best Practice Spotlight Organization (BPSO). SHSC decided from the onset to exceed the contractual obligations and as a result is implementing additional practices and developing more staff, inclusive of staff spanning the entire interprofessional team.

SHSC has developed customized education for staff and internally branded this work – staff engaging in this work become iLead Champions. Qualification as an iLead Champion requires quality improvement education, inclusive of change management, rapid cycle improvement, stakeholder engagement and other key concepts. Immediately following this education iLead Champions are exposed to the situation, background & assessment of the current state and future need of a specific best practice and are engaged in an ‘ASK’ to return to their respective units to influence local clinical practice.

A key component of this work is grounding it all in data and developing a critical mass of staff who understand process and outcome indicators and the influence they have collectively on patient outcomes.
Sustainability of this work is being addressed in establishing a venue to facilitate the continued gathering of Interprofessional staff on a monthly basis to review, discuss and collaborate on the clinical experience. This will become the forum to share results and successes over time which will move best practice to the bedside efficiently and effectively. A collaborative, knowledgeable and engaged staff is an essential component in the movement of best practice to patient care.

P2-9. Enhancing the Primary Care Management of Patients with Multiple Chronic Conditions through Interprofessional Education

- **Bobby Lowery**, East Carolina University, Greenville, NC, USA
- **Carol King**, East Carolina University, Greenville, NC, USA
- **Karl Faser**, East Carolina University, Greenville, NC, USA
- **Michelle Skipper**, East Carolina University, Greenville, NC, USA

Submitted abstract:
The 2010 report, The Future of Nursing: Leading Change, Advancing Health recommended redesigning nursing education to deliver clinically and culturally competent interprofessional healthcare. Clinical experiences may provide inconsistent opportunities to develop clinical leadership skills. Virtual experiences can provide standardization in this process.

East Carolina University College of Nursing (ECUCON) has an 18 year history of utilizing innovative technology to educate students including a virtual community clinic learning environment (VCCLE); an asynchronous, immersive, web-based environment where students interact with virtual patients and preceptors to develop critical reasoning clinical skills. The Office of Clinical Skills Assessment and Education (OCSAE), a nationally recognized clinical teaching and assessment center, provides an opportunity for interprofessional students to participate in standardized patient simulations of individuals with multiple chronic conditions (MCC) representative of the diversity in the region.

This project addresses the health care needs of individuals in rural communities with MCC by implementing interprofessional education (IPE) strategies and IPE competencies in the curriculum of Adult Gerontology Nurse Practitioner (AGNP) and Family Nurse Practitioner (FNP) students at ECUCON. Collaboration with the interprofessional NC Agromedicine Institute will prepare students to care for individuals with MCCs who work in rural occupations. A partnership with a Federally Qualified Health Center (FQHC) provides an opportunity to evaluate the outcomes of IPE in a setting that has a strong history of serving economically disadvantaged, minority populations.

**Objectives:** The objectives of this proposal are to: 1) Infuse IPE competencies (values/ethics, roles and responsibilities, interprofessional communication, and teams and teamwork) throughout the AGNP and FNP curriculum; 2) Create case-based interprofessional learning scenarios in the VCCLE that address the IPE core competencies in the management of individuals with MCC, including those due to occupational causes; 3) Develop and expand clinical and didactic content in the management of individuals with MCC living in rural communities through interprofessional OSCE experiences; and 4) Promote and evaluate IPE competencies used by clinicians, faculty, and students practicing in a rural, underserved community serving a diverse, ethnic minority population.

**Methods:** The overall goal of this project is to graduate AGNP and FNP students who can provide evidence-based primary care to individuals with MCC within an interprofessional framework to clients
living in rural underserved communities through the processes outlined in the objectives. We have partnered with Robeson Healthcare Corporation, a long-term partner in providing clinical education opportunities interprofessional students to provide comprehensive healthcare across the life cycle for culturally diverse clients living with MCCs. It is our goal to place students in the RHCC sites every semester of years two and three.

**Implications:** As leaders in complex health settings, NPs must understand and apply IPEC core competencies for interprofessional practice to ensure consumer access to high quality primary health care, especially in rural, underserved settings. This panel discussion focuses on educating teams and integrating advanced practice providers in the clinical practice environment. Process and outcome evaluation of IPE will utilize the four core interprofessional competencies that are linked to the five IOM core competencies for all health professionals.

**P2-10. Shifting from guidelines to pathways: experience from two multidisciplinary hospital based spine centers utilizing a primary spine practitioner**

- **John Ventura,** Spine Care Partners, LLC, Rochester, NY, USA
- **Ian Paskowski,** Jordan Hospital Spine Center, Plymouth, MA, USA
- **Michael Allgeier,** Mercy Hospital (Chicago), Spine and Back Care, Chicago, IL, USA
- **Michael J. Schneider,** University of Pittsburgh, Pittsburgh, PA, USA

**Submitted abstract:**

Healthcare has gone through a hierarchical shift when it comes to incorporating evidence into clinical practice – staring with anecdote, then standardized empiricism, to Sacket’s evidence based medicine – practicing at the intersection of best evidence, clinician skills, patient values. From this work we have witnessed the development of multiple guidelines, especially in the field of spine pain. While we have evidence that guideline based care can be effective and efficient (1), what we don’t see is clinician compliance with guideline based care. (2) There are multiple barriers to the successful implementation of guideline based care – from a lack of awareness of practice variation on the part of the clinicians to misuse of guidelines by insurance carriers.

We present our experience with the implementation of a multidisciplinary continuum of care pathway for spine care that includes a primary spine practitioner (PSP) in two hospital based spine centers. The PSP a clinician that will not only efficiently evaluate the spine pain patient, but effectively and efficiently manage the vast majority of these patients. We have seen high patient satisfaction, well managed costs per case and very good clinical improvement. (3)


**Author Biographies**

John M Ventura, DC (corresponding author) has 30 years experience in clinical practice and has over 15 years teaching experience at New York Chiropractic College, D’Youville College of Chiropractic and University of Rochester School of Medicine. He sits on the technical expert panel that wrote the PQRS
measures for the chiropractic profession. He currently serves as owner/consultant for SpineCare Partners, a company that implements a spine continuum of care pathway in health care organizations.

Ian Paskowski, DC currently serves as a clinician and medical director of Jordan Hospital Spine Care. He oversees a hospital based spine program with 3 locations and 5 primary spine practitioners. He has published findings and lectured around the world on the unique approach to spine care at Jordan Hospital Spine Care. His training prior to practicing at Jordan Hospital included training rotations at Bethesda Naval Medical Center and Monroe Community Hospital.

Michael Allgeier, DC currently serves as a clinician and medical director of Mercy Spine and Back Care of Mercy Hospital, Chicago. He is certified by the McKenzie Institute in the mechanical diagnosis and treatment of spine pain.

P2-11. Managing the Self within Interprofessional Teams in Health Care Environments

- Linda Macdougall, Western University, London, ON, Canada

Submitted abstract:
Background: The goal of this research study is to gain insight into fostering emotionally safe work environments that build resilient health care professionals to ultimately champion the well-being of patients. The rising prevalence of bullying in health care workplace settings compromises the quality of care to patients and jeopardizes the self-worth of interprofessional health care providers. Where there is a threat to the social bond between individuals, shame is present. Recognizing one’s shame response in conflictual encounters with interprofessional team members may create awareness of how unacknowledged shame can jeopardize working relationships between health professionals. Once awareness is established the professional will feel greater resilience to enter conflictual encounters with enhanced capacity to share in interprofessional conflict resolutions. The purpose of this study is to determine what is the correlation between shame coping styles and conflict management modes leading to the outcome of resilience on professional capability while managing the self in health care environments.

Objectives: To discuss this research study for further exploration of the proposed model. To gain feedback from participants that will enhance readying this innovative model for testing.

Methods: This is a proposed mixed methods study grounded in the humanistic caring approach. Data are planned to be collected from interprofessional health science students who will respond to open ended questions and complete the Compass of Shame Scale version 5, the Thomas-Kilmann Conflict Mode Instrument and the Connor-Davidson Resilience Scale after reading shame inducing vignettes.

Results: Understanding the relationship between shame coping styles, conflict style, and resilience will add the dimension of shame to the interpretation of interprofessional conflict. Implications of your proposed presentation

This knowledge can be incorporated within the education of health science students to enhance their experiences between and within professions upon graduation. The importance of enacting socially adaptive long-term shame management skills within professionals is critical to the vulnerable patients, depending on their care.
Author Biographies
Linda MacDougall is engaged in doctoral studies at the University of Western Ontario. She is passionate about student well-being and facilitates using a humanistic caring approach with nursing students in the Collaborative BScN Program at St. Clair College, Thames Campus, Chatham, Ontario.

Committee Members:
(Faculty Advisor) Dr. Carole Orchard EdD, Associate Professor, Arthur Labatt Family School of Nursing, Siebens Drake Research Institute

Dr. Bing Siang Gan, MD PhD FRCSC FACS, Surgeon, Roth McFarlane Hand and Upper Limb Centre, St. Joseph’s Health Care London

Dr. Ian Nicholson, PhD, Psychologist, Psychology and Social Work, London Health Sciences Centre

P2-12. Interprofessional Team together with Patients Shape Point of Care Innovation in an Intensive Mental Health Environment

- Kate Galloway, Toronto General Hospital, Toronto, ON, Canada
- Jenna Mcleod, Toronto General Hospital, Toronto, ON, Canada
- Aideen Carroll, University Health Network, Toronto, ON, Canada
- Debbie Rolfe, University Health Network, Toronto, ON, Canada

Submitted abstract:
Background: The interprofessional team, including patients identified that communication between team members about the patient’s plan of care was inconsistent in the intensive care environment. To build a shared practice in consistent team communication, the initiative is testing a knowledge use model for implementing sustainable practice change at the point of care. An interprofessional team came together to implement this initiative.

Objectives: Consider the power and relevance of patients’ voices to guide and design care pathways. Understand ways in which an interprofessional team at the unit level and with allies across a hospital system can drive change. Consider practice change possibilities through the utilization of a knowledge use model in a complex environment.

Methods: The interprofessional team utilized the Clinical Practice Process Model to guide the creation of an integrated interprofessional care plan. As a first stage, ten patients on the general in-patient unit were interviewed about their experiences related to their plan of care when they were in intensive care. The team undertook a literature review, engaged with key stakeholders through focus groups and interviews which included external organizations.

Results: The patients’ stories revealed several themes that shaped the integrated interprofessional care plan. The presentation will include results of an environmental and organizational scan and literature review together with outcomes of the focus groups held with the team members within psychiatry. We will highlight how this is informing both the group and the team in the co-creation of an integrated care plan.

Implications: Integrating and elevating patients’ voices in the design of an integrated Interprofessional care plan puts patients in the center of our care as valued member of the team. The implementation of
this knowledge use model with an interprofessional point of care group and within a psychiatric setting are both important features of this innovative work.

P2-13. Team-Based Learning: Collaboration and Teamwork to Increase Knowledge for Geriatrics Practice

- Cara Busenhart, University of Kansas Medical Center, Kansas City, KS, USA
- Shelley Bhattacharya, University of Kansas Medical Center, Kansas City, KS, USA
- Kristy Johnston, University of Kansas Medical Center, Kansas City, KS, USA
- Nellie Modares, University of Kansas Medical Center, Kansas City, KS, USA

Submitted abstract:
**Background:** Team-based learning (TBL) has been used in health professions education, but is relatively new to the genre of interprofessional education (IPE). As a replacement for large instructor-delivered lectures, TBL uses active-learning, small-group collaboration as an innovative educational methodology to deliver content and apply newly-acquired knowledge. Individual (I-RAT) and team (T-RAT) assessments are carried out prior to a mini-lecture and/or application exercise.

The Geriatrics Champions Program (GCP), an interprofessional program teaching geriatrics competencies, was designed for multiple health professions and uses TBL. Learners are assigned preparatory readings prior to arriving for one of four course sessions. Individual learners are placed in teams of 5-7 members and seated with a faculty facilitator. After completing an individual readiness assurance test (I-RAT), team members repeat the same test as a team (team readiness assurance test [T-RAT]) which allows for pulling knowledge from multiple professions. A small lecture and/or application exercise follows, where learners are able to apply their new-found knowledge and team skills.

**Methods:** Individual Readiness Assurance Tests (I-RAT) and Team Readiness Assurance Tests (T-RAT) scores were compared for changes (improvement vs. decline vs. no change) in individual learners and different health professions.

**Results:** Results of I-RAT and T-RAT scores will be provided for the 4 sessions of the 2013-2014 GCP. Individuals will be evaluated for changes between individual and team scores. Each health profession will also be evaluated for changes between individual and team scores.

**Implications:** Implications for further evaluation and expansion in education and practice will be discussed.


- Rollin Wright, University of Pittsburgh, School of Medicine, Pittsburgh, PA, USA
- Anne Kisak, UPMC, Benedum Geriatrics at Magee-Womens Hospital, Pittsburgh, PA, USA
- Joshua Uy, University of Pittsburgh, School of Medicine, Pittsburgh, PA, USA

Submitted abstract:
**Background:** The art in medicine and health care delivery occurs where evidence based practice and the patient’s values intersect, particularly when the patient is elderly or medically complex. Understanding a patient’s values and ensuring that medical care is appropriately goal-directed requires an interprofessional team effort. Yet, health professions learners are trained to approach medical decision making from a perspective unique to their respective disciplines. “Is It Worth It?” (IIWIT) teaches critical
thinking using a collaborative or shared decision making framework that maps a standard-of-care intervention to patient-centered goals of care.

**Education Intervention:** We created a team-based exercise where members of interprofessional learner teams identify a case and use the IIWIT Framework to debate the pros and cons of a specific preventive or therapeutic intervention (eg. medication). The IIWIT framework consists of 8 questions or “pearls” to guide critical thinking about whether to pursue the intervention in an older patient. The answers to the questions are informed by the evidence-based literature and by detailed understanding of the patient’s goals and priorities. The teams research the answers to the IIWIT Framework questions and present convincingly their positions (pro v. con) debate style. Each side has the opportunity to rebut after the other side’s argument. At the conclusion of the debate, the teams vote on whether to do the intervention.

**Discussion:** We used the IIWIT Framework with interprofessional learners in the classroom and in the inpatient clinical setting. Anecdotally in trial runs, learners report a high level of satisfaction with the exercise. Future study will probe specific collaborative and critical thinking skills learned. Used in a setting where interprofessional learners work together, this framework teaches participants how to collaborate across disciplines and with patients, consider the alternative viewpoint to not intervene, and prioritize the patient’s informed preferences in shared healthcare decision making.

**P2-15. Evaluating the Performance of Interprofessional Learners and Teams**

- **Rollin Wright**, University of Pittsburgh, School of Medicine, Pittsburgh, PA, USA
- **Cathy Grant**, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- **James Pschirer**, University of Pittsburgh, School of Pharmacy, Pittsburgh, PA, USA

**Submitted abstract:**

**Background:** Immediate evaluation and feedback on the effectiveness of teaming at both the team and individual learner level are necessary but challenging to implement. Most evaluation tools are burdensome self-report surveys designed for a specific clinical discipline or situation, a target learner level, lacking generalizability. We aimed to develop interprofessional education (IPE) evaluation tools that could be applied to different clinical teams, across learner levels, whereby learners identify and accurately rate demonstration of attributes related to team performance.

**Education Intervention:** We divided 200 health professions learners into 8 interprofessional and 16 like-professional teams in an undergraduate health professions IPE course in October 2013 and introduced IPE concepts and competencies. We tasked teams to collaborate to transition a patient from one health care setting to another in a simulation that required them to apply IPE concepts. Learners completed a self-report of their team’s overall performance and assessed the performance of each team member in a 360-degree peer review using 2 instruments adapted from the Agency of Healthcare Research and Quality’s TeamSTEPPS program. We video-recorded teams at work in the simulation. Trained evaluators will use the same instruments to grade the teamwork exhibited by 16 teams. We will compare the interprofessional and like-professional teams’ performances and compare learners’ self-report of IPE mastery with the trained evaluators’ assessments.

**Discussion:** Most IPE initiatives use evaluation techniques that rely on trainees’ self report of mastery. Our experience suggests that learners over-estimate their teams’, their peers’ and their own skills and performance. This study will measure the discrepancy between objective evaluators’ and learners’ self-
report. It will compare how interprofessional and like-professional teams completed their 360-degree peer evaluations which were intended to encourage more honest reporting. We will use our findings to create generalizable team assessment and peer-review instruments that encourage more accurate rating of team performance.

**P2-16. Thematic Analysis on Interprofessional Learning using Course Evaluations**

- Tamzin Batteson, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- Reena Antony, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

Submitted abstract:

**Background:** Interprofessional Teams and Culture in Health Care (HMTD) is a two quarter interprofessional experiential education course for first year graduate level health profession students at Rosalind Franklin University of Medicine and Science. The curriculum of the class is framed from an Active Learning and Constructivist perspective focused around Interprofessional group Service Learning Projects. The learning experience of HMTD is spread over sixteen sessions and incorporates large and small group activities. Students are asked to evaluate blocks of sessions at intervals throughout the program and give feedback on the session’s value in terms of introducing them to the idea of working as collaborative teams for the future benefit of patient outcomes. The programs involved in HMTD are: Medicine, Nurse Anesthesia, Pathology Assistant, Pharmacy, Physical Therapy, Physician Assistant, Podiatry, and Psychology.

**Objective:** The current research focused on the student’s written evaluation of what they found most beneficial in sessions 1 – 4.

**Methods:** These sessions covered an introduction to the course, Service Learning, Prevention Education/Change Management, TeamSTEPPS and Service Learning Planning. We asked the students the following question “Of all of the activities from sessions 1-4, what has been the most beneficial to you in terms of understanding interprofessional patient centered care? Why?”

**Results:** We conducted a Thematic Analysis on their responses with Inter-rater reliability. The themes the emerged were: personal story, communication, getting to know other students, teamwork and interprofessional patient care.

**Outcomes:** Students shared positive and constructive feedback on the importance of interprofessionalism. Weaving the foundations of interprofessional practice using instructional strategies such as personal stories, didactic and interactive activities allowed students to be immersed in team-based conversations related to the culture in health care. Incidentally discoveries through reflection, peer-to-peer education, and service learning cultivated new insight to work collaboratively as teams.

**P2-17. A meta-cognitive approach to assessing collaborative process through an interprofessional student run outpatient clinic**

- Tamzin Batteson, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- Reena Antony, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- Susan Tappert, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
Submitted abstract:

**Background:** According to Kolb (1984) Experiential Learning Theory (ELT) posits that experience plays a central role in the learning process, and differentiates itself from cognitive theories of learning and behavioral theories of learning which place less importance of the role of affect and subjective experience respectively (Kolb, Boyatizis & Mainemelas, 1999). ELT derives from Dewey’s model of learning and the Lewinian learning model. Dewey’s model integrates “experience and concepts, observations, and action” (Kolb, 1984, p.21), by which Dewey (and Kolb) meant that experiential learning is a process that includes experience, perception, cognition and action (Andresen, Boud & Cohen, 2001). As such, experiential learning may contain measurable components such as metacognitive awareness and reflective learning. These components may provide objective outcomes to assess the degree of success that experiential learning might have on IPE.

**Objective:** This study was designed to establish whether objective outcomes of Interprofessional Practice could be garnered from student experience in-order to assess process.

**Method:** Weekly reflective journals were written by student volunteers at a student run IP clinic over a three month period based on Doucet & Wilson’s (1997) three-step model of self-reflection. Thompson et al's (2009) Team Performance Scale (TPS) was used to assess attitudinal change in team work.

**Results:** The journals will be analyzed using Interpretive Phenomenological Analysis (IPA) to assess cognitive process. Once process is understood objective outcomes can be designed for future IPE curriculum. Analysis of the TPS will show if there is any change between time one and two.

**Implication:** It is hoped that the ratings on the TPS will improve from time one to time two and that themes garnered from the IPA may begin to explain the processes behind the improvement. The impact of experiential learning theory as a theoretical framework on service learning may then be better understood.

**P2-18. Are You Thinking What I am Thinking? Utilizing Verbal Protocol, Novice to Expert Paradigm and Metacognition in the Creation of a Reflection to Procedural Andragogy in IP Graduate Students**

- Tamzin Batteson, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- William Gordon, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

Submitted abstract:

**Background:** Understanding processes such as decision making, cognitive shortcuts and functional fixedness is crucial in the Interprofessional education of health professionals. Especially in stressful affect laden busy contexts we often are unaware of why we act or decide to act in the way that we do. Clark (2009) states that ‘IPE involves learning and learning requires reflection’. Methodologies such as verbal protocol analysis, metacognition and novice to expert paradigms by their very nature elicit reflection. Metacognition is “knowledge about the nature of people as cognizers, about the nature of different cognitive tasks, and about possible strategies that can be applied to the solution of different tasks” (Flavell 1999, p. 21). Verbal Protocols allows individuals to become aware of this (Fonteyn, Kuipers & Grobe, 1993).

**Objective:** To assess an interprofessional learning strategy developed from cognitive theories of education.
**Method:** An andragogy using verbal protocol, novice to expert paradigm and metacognition will be piloted on two groups of 1st year Graduate students at RFUMS. Those in condition one will be instructed to work as a multi-professional team, those in condition two will be instructed to work as an Interprofessional team. Both groups will be presented with incomplete patient information and asked to use verbal protocol to solve the problem.

**Results:** Three outcomes are expected from the study. The first is that students in condition one will be more successful in diagnosis, secondly they will become aware of their own decision making which should lead to fewer errors and third, they will gain an appreciation of the importance of IP in patient care.

**Implications:** Metacognition and the ability to make reflective judgments are related (Hofer, 2004), and lead to sound reflective judgments minimizing cognitive errors and avoiding cognitive shortcuts and functional fixedness. Learning this in an IP team should facilitate awareness of other team members’ knowledge area and understanding of how to use the shared information benefiting patient outcomes.

**P2-19. On Coming Together Critical Differences in Hierarchy and Heterarchy as Team Structures**

- **William Gordon,** Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- **Gregory L. Hall,** Chicago, IL, USA

**Submitted abstract:**

**Background:** Interprofessional team models deconstruct hierarchy by creating collaborative structures in which shared leadership can be practiced and people, professions and opinions are respected and valued. In traditional medical models, we have both educated and socialized program graduates to defer to one person or profession perceived as superior in a given circumstance, and dynamic team interactions become muted in deference to those constructs. Teams that are formed hierarchically produce results (that are predictably restricted by the identified power structure) and function differently than those teams formed around heterarchal ideals. Creating teams that challenge such hierarchical structures and their inherent limitations presents opportunities to enhance outcomes based on these structural and functional shifts.

**Objective:** The purpose of this poster will be to clarify similarities and differences in hierarchical and heterarchal paradigms for team structures, promoting their optimal formation.

**Method:** This poster will graphically identify differences in how hierarchical and heterarchal teams are structured and will directly compare them in terms of characteristics, power dynamics and flow, value and vision sharing, and trust and accountability. These identified differences will project a shift in performance outcomes by utilizing new structures, based on previous research in team functioning both within and outside the medical models.

**Results and Implications:** Literature surveys and studies suggest considerable differences in functioning between teams functioning in hierarchies versus those un which power relationships are shared. By identifying the most effective structures and opportunities to practice shared leadership for team organization, composition, and action, our policies, cultures, practices, and outcomes can be positively impacted. By first recognizing these difference, we can then change the ways we teach and practice teams, with the long term results being a change in health care culture and improved patient outcomes.
P2-20. A Comparison of the RIPLS and the IEPS for Assessing Health Professional Students’ Attitude Toward Interprofessional Learning

- Desiree Lie, University of Southern California, Los Angeles, CA, USA
- Kevin Loheny, University of Southern California, Los Angeles, CA, USA
- Cha Chi Fung, University of Southern California, Los Angeles, CA, USA
- Melissa Durham, University of Southern California, Los Angeles, CA, USA

Submitted abstract:
Rationale: The validated 19-item Readiness for Interprofessional Learning Scale (RIPLS) is often used for assessing attitudes toward interprofessional education (IPE). The 12-item Interdisciplinary Education Perceptions Scale (IEPS) has not yet been validated among the professions of medicine, pharmacy and physician assistants (PAs) in the US and Canada. The discriminatory ability of the two scales has not been directly compared.

Objective: To compare psychometric properties of the RIPLS and IEPS and to examine the ability of each scale to discriminate mean scores among student subgroups (gender, profession, seniority and prior IPE exposure).

Method: We conducted a cross-sectional (Qualtrics ©) survey (RIPLS and IEPS) of junior and senior students in medicine (n=360), pharmacy (n=360) and the PA profession (n=106). Descriptive statistics were used to report aggregate mean scores of subgroups. The internal consistency of each scale was assessed using Cronbach’s alpha. Concurrent validity was measured by Pearson correlation coefficients. ANOVAs were performed to assess the discriminatory ability of each scale.

Results: Response rate was 82%. Cronbach’s alpha was .85 (RIPLS) and .91 (IEPS). Both scales distinguished scores by profession for junior students (PA vs. medicine and pharmacy) and by prior IPE exposure (none vs. slight, moderate and high). The RIPLS in addition discriminated scores by gender (all three professions) and by training level (PAs only).

Conclusions: Both the RIPLS and the IEPS can detect attitude differences by profession and prior IPE exposure. The RIPLS also distinguishes attitude by gender and training level. The RIPLS is designed to discern students’ own attitude toward interprofessional learning and may be useful among students at all training stages; while the IEPS discerns perceived attitudes about team collaboration for students’ own professions and may be more appropriate for advanced students with greater exposure to actual practice settings.

P2-21. Building educational frameworks and capacity for sustainable IPE curricular programming

- Rahim Karim, Centennial College, School of Community and Health Studies, Toronto, ON, Canada
- Steven Jacobs, Centennial College, Toronto, ON, Canada

Submitted abstract:
Background: The School of Community and Health Studies at Centennial College is a leader in Interprofessional Education with a number of successful initiatives. The School spread across three campuses consists of Nursing, Emergency Management and Public Safety, Community Services, Child and Family Studies and Health and Wellness areas. It offers certificate, diploma, postgraduate,
apprenticeship and joint/collaborative degree programs. During our school-wide and departmental meetings, faculty have expressed a desire to expand our IPE activities for themselves and for our students. School faculty members have various levels of IPE background knowledge and are at different stages with respect to IPE activity development and/or use within their programs.

**Objectives:**
1. To provide faculty with increased development and collaboration opportunities in order to build IPE activities.
2. Provide for a framework moving forward on which IPE activities can be built within program curriculum.

**Methods:** Faculty development in IPE occurs through faculty requesting funds to attend development activities. In addition, collaboration between faculty and IPE development activities are also encouraged at departmental meetings and through inter-departmental collaboration. In Fall 2013, we held a school wide development event focusing around leading for collaboration using the Appreciative Inquiry framework. This provided a forum for our entire School faculty and staff to celebrate and brainstorm for a preferred future regarding IPE within our School. As a result, we have created an IPE directional plan using WHO guidelines and the Canadian Interprofessional Health Collaborative Framework.

**Results:** Informal feedback from our faculty and staff regarding the school wide development and collaboration event was positive. Our new directional plan will be disseminated in school wide and departmental meetings by June 2014. As part of building a directional plan, we have also mapped all our current School IPE activities using the CIHC framework.

**Implications:** Building capacity and a consistent framework are critical to ensuring sustainable IPE curricular activities in a large School.

**Author Biographies**
Rahim Karim BSc, DC, MBA, FCCPOR(C), CHE – Dr. Rahim Karim is Dean, School of Community and Health Studies at Centennial College. He has been an administrator, educator and clinician. Dr. Karim has published in peer reviewed journals and presented internationally on topics encompassing health professional education and clinical practice. He has a special interest in Interprofessional Education. Steven Jacobs, BScN, MN, MA Ed - Steven Jacobs is Chair, Nursing and IPE Lead at Centennial College. He has been full-time for seven years and within this time, has taught in the Practical Nursing program, and coordinated this and other programs. Steven began his Doctorate studies in Fall 2013 through the University of Victoria. Besides the Red Cross initiative, Steven is currently PI on a PN student Peer Mentorship project at Centennial College.

**P2-22. Changes in attitudes toward interprofessional health care teams between Gunma University and Kanazawa University**

- **Ayako Igarashi**, Gunma University Hospital, Maebashi, Gunma, Japan
- **Takatoshi Makino**, Gunma University, Graduate School of Health Sciences, Maebashi, Gunma, Japan
- **Hideomi Watanabe**, Gunma University, Graduate School of Health Sciences, Maebashi, Gunma, Japan
Submitted abstract:

Background: Transformative scale up of health professional education increase the quality, quality and relevance of the health care providers of the future. Effective interprofessional education (IPE) fosters the collaborative practice (CP) -ready health workers.

Objectives: This study was to analyze attitudes toward health care team between students of health sciences in Gunma University implementing comprehensive IPE programs and those in Kanazawa University delivering curricula without IPE.

Methods: Respondents were asked to rate their attitudes both first year students and third year students at the end of first semesters in the 2012 academic year. Gunma University School of Health Sciences consists of the departments of Nursing, Laboratory Sciences, Physical Therapy and Occupational Therapy. Kanazawa University School of Health Sciences consists of the departments of Nursing, Laboratory Sciences, Physical Therapy, Occupational Therapy and Radiological Technology. This study used the modified Attitudes Toward Health Care Teams Scale (mATHCTS) adapted by Curran et al. (2007), which has a 5-point Likert scale from one (strongly disagree) to five (strongly agree). The paired t-test or Mann-Whitney U test was used to analyze dependent variables within individuals for normally distributed date or other date, respectively. A p value of <0.05 was considered statistically significant.

Results: The overall mean score of students in Gunma University was significantly higher than that of students in Kanazawa University on the mATHCTS. The overall mean score of female was significantly higher than male on the mATHCTS.

Implications: Our findings suggest that IPE programs may play an important role in fostering attitudes toward health care team.

P2-23. Chains of actions – interprofessional knowing in practice

- Annika Lindh Falk, Linköping University, Faculty of Health Sciences, Linköping, Sweden

Submitted abstract:

Background: Interprofessional team work is an important component in the delivery of high quality health care, not least in the area of rehabilitation. Teamwork involves continuous interaction and knowledge sharing between professionals through a complex process that can either help or hinder its success. Research on interprofessional practice and learning is increasing, using different foci and approaches to explore the issue of interprofessional collaboration. The present study is based on empirical data from ethnographic fieldwork, using a sociomaterial approach as the theoretical framework for studying health care practice. The study has a particular focus on interprofessional collaboration and how knowing in practice is emerged and connected.

Aim: To explore how knowledge is enacted and enables interprofessional practice in a rehabilitation ward.

Method: An ethnographic design was used in order to focus on how knowledge is enacted and shared in a practice of interprofessional teamwork in health care. The analysis was an iterative process between inductive and theory driven processes of analysis
Result: Three different situations of professional practice are presented and interpreted from a sociomaterial perspective. The situations of professional practice are highlighted as activities which hang together in a nexus of dynamic relationships between the collaborating professionals’ doings, sayings and relatings. The findings shows how knowing changes when taken up in action by different professionals. The knowing in relation to doings, sayings and relatings is an ongoing process which spreads and evolves between professionals during the daily work.

Conclusions: Individual’s professional sayings and doings effect other professionals’ sayings and doings in their daily work like a chain of action. The knowing spreads around the team and changes when taken up in actions by different professionals. An important issue as health professional in a team is to participate in producing and sharing new knowledge for producing effective work in today’s health care practice.

Author Biographies
Annika Lindh Falk is a university lecturer at the Occupational Therapy Programme, at Faculty of Health Sciences, Linköping University. She is also coordinator of the Curriculum for Interprofessional Education at the Faculty. Annika is doctoral student in Medical Education with the specific focus on interprofessional education and collaboration in practice.

P2-24. The Power of Peer Assessment on Interprofessional Groupwork
- Keith Stevenson, Glasgow Caledonian University, Glasgow, Scotland, UK
- John Smith, Glasgow Caledonian University, Glasgow, Scotland, UK
- Chris Seenan, Glasgow Caledonian University, Glasgow, Scotland, UK
- Nichola McLaron, Glasgow Caledonian University, Glasgow, Scotland, UK

Submitted abstract:
Glasgow Caledonian University is one of the largest providers of credit bearing Pre-registration Interprofessional Education modules in the UK. The second year pre-registration IPE module uses Research Methods in Health and Social Care as its vehicle for interprofessional group work. In academic session 2012-13 740 students from 8 professional disciplines (nursing, physiotherapy, occupational therapy, podiatry, radiotherapy, diagnostic imaging, social work and paramedic practice) took the module which was delivered mainly online but with regular peer assessed teamwork tasks that had to be completed and submitted electronically every second week for marking. After the submission of each task the students were asked to complete 4 online peer assessment grids relating to each group member's contribution to the task. A factor representing each student's contribution was then automatically generated that adjusted the tutor awarded group mark to reflect the individual input to the task as judged by all the group members.

The teaching team of 19 tutor facilitators were keen to see the effect of peer assessment on student engagement with the module. Four questions were asked of the data a) what was the impact of self assessment on the peer assessment calculation? b) What numerical advantage/disadvantage did the majority of students experience? c)over the five tasks was there a tendency towards greater group cohesion as displayed by their marking variance? d)What proportion of low scorers in task 1 were able to improve their scores on the remaining 4 tasks to succeed in being accepted as a contributing group member and pass the group work element of the module?
These findings along with student feedback provide strong evidence of the persuasive power of online peer assessment in promoting student engagement in team activities.

P2-25. Trials and Tribulations – Building an Interprofessional Education Framework

- **Nichola McLarnon**, Glasgow Caledonian University, Glasgow, Scotland, UK
- **Dora Howes**, Glasgow Caledonian University, Glasgow, Scotland, UK
- **Jamie McDermott**, Glasgow Caledonian University, Glasgow, Scotland, UK

Submitted abstract:

**Background:** Within the School of Health and Life Sciences at Glasgow Caledonian University (GCU), Interprofessional Education (IPE) for Health and Social Work students is uniquely woven through the student’s programme of study from first to final year at undergraduate level (and also at pre-registration Masters level). These IPE specific modules are credit bearing and at undergraduate level focus upon professional attributes and behaviours in Level 1, evidence based practice in Levels 2 and 3 and leadership and entrepreneurialism in Level 4.

**Objectives/Methods:** This poster will provide an overview of the current framework for IPE at Glasgow Caledonian University – in relation to the considerations of delivering an embedded, mandatory, interprofessional suite of modules to 1000 students in each level of study, across 2 institutions and across 16 professions/ fields of practice, including:
- Dietetics
- Nursing
- Operating Department Practice
- Oral Health Science
- Orthoptics
- Occupational Therapy
- Radiography – diagnostic and therapeutic
- Physiotherapy
- Podiatry
- Social Work
- Prosthetics and Orthotics (University of Strathclyde)
- Speech and Language (University of Strathclyde)

**Results:** This poster will outline the policy drivers, design, structure, implementation and logistics of the current IPE framework at GCU. It will discuss the challenges and successes inherent in the development and implementation of such an initiative. It will outline recommendations for successful planning, implementing and evaluation of large scale IPE, in addition to the next steps for interprofessional education at GCU.

**Author Biographies**

Nichola McLarnon is a senior lecturer in Podiatry and Learning, Teaching and Quality Lead for the Department of Psychology, Social Work and Allied Health Sciences at Glasgow Caledonian University. She is module leader for the first year interprofessional module for allied health and social work students – delivered to 1000 students, crossing 16 disciplines and 2 institutions.

Dora Howes - after qualifying in 1984, Dora spent nine years in clinical practice within a general medical setting. She entered higher education in 1993 where she developed the first post-registration top-up
degree for nurses in Lanarkshire. She then transferred to Glasgow Caledonian University in 2000 to focus on pre-registration nurse education. She has been involved with interprofessional education since 2004 and is currently co-module lead for one of the biggest interprofessional modules in Scotland.

Jamie McDermott is currently Programme Leader for the MSc (pre-registration) Occupational Therapy degree at Glasgow Caledonian University. He is interested in learning and assessment methods in IPE and more generally in how students use academic feedback to improve their academic performance. Jamie is currently a PhD candidate at GCU where his research is focused on Consultant Allied Health Professionals and how they contribute to care of people with long term conditions.

P2-26. Guided Team Self-Correction: A Debrief Model to Evaluate Teamwork Skills and Behaviors in the Health Professions

- **Jeannie Garber**, Jefferson College of Health Sciences and Virginia Tech Carilion School of Medicine, Roanoke, VA, USA
- **Sonya Echols**, Jefferson College of Health Sciences and Virginia Tech Carilion School of Medicine, Roanoke, VA, USA
- **Sara Brown**, Jefferson College of Health Sciences, Roanoke, VA, USA
- **David Trinkle**, Virginia Tech Carilion, School of Medicine, Roanoke, VA, USA

Submitted abstract:

**Background**: Healthcare providers’ must be familiar with and practice effective teamwork skills and behaviors to ensure quality and safe patient care. There is no argument about the need for the skills and behaviors, however, there is an ongoing dilemma regarding how to best evaluate and positively impact teamwork skills and behaviors. An interprofessional leadership course with Nursing, Medical and Physician Assistant students from Jefferson College of Health Sciences and Virginia Tech Carilion School of Medicine provides a unique learning experience using Guided Team Self Correction as a model to assess, evaluate and develop teamwork skills and behaviors. The four dimensions of GTSC method are: 1) Information Exchange, 2) Communication Delivery, 3) Supporting Behavior, and 4) Team Leadership/Followership. The debrief process identifies team strengths, weaknesses and performance goals in each of the four GTSC dimensions. Performance goals are brought forward and analyzed during the next team encounter. The GTSC process is used weekly to debrief the interprofessional activities of the leadership course. This hands-on workshop will be a highly interactive skill building experience and may be used in education and practice settings.

**Objectives**:

- Explore the components of the Guided Team Self Correction Model.
- Develop knowledge about effective teamwork and team self correction that is transportable to new sets of teammates and task environments.
- Develop skills in debriefing teamwork skills and behaviors.
- Discuss the use of this model and its implications in education and practice.

**Methods**: A brief didactic introduction for Guided Team Self Correction concepts and structure will be shared. Clinical video scenarios will serve as examples of teamwork skills and behaviors and will be debriefed in real time by the participants using the Guided Team Self Correction Model.

**Results**: Participants will gain new knowledge and skills for assessing, evaluating and developing teamwork skills and behaviors using the Guided Team Self Correction Model. Participants will leave with
a tangible action to support the development of teamwork skills and behaviors for students and practitioners.

**Implications of Proposed Session:** This session will create new conversation, new research ideas and facilitate a discussion regarding current and proposed models for the debriefing process in the health professions.

**Author Biographies**

Jeannie Scruggs Garber, DNP, RN, NEA-BC is an Assistant Professor of Nursing and the Department of Interprofessionalism at Jefferson College of Health Sciences and Virginia Tech Carilion School of Medicine. Dr. Garber has over 30 years of clinical, administrative and higher education experience. Her research line of inquiry is focused on interprofessional teamwork skills and behaviors and how these behaviors impact quality, patient safety and clinical outcomes.

Sonya Echols, PhD is an Associate Professor at Jefferson College of Health Sciences and Virginia Tech Carilion School of Medicine and serves as the Director of Interprofessional Education and Faculty Development for Jefferson College of Health Sciences. Dr. Echols has held clinical, education, and administrative roles. Her research interests are focused on simulation in healthcare.

Sara Brown is an Assistant Professor of Nursing at Jefferson College of Health Sciences and an Instructor in the Department of Interprofessionalism at the Virginia Tech Carilion School of Medicine in Roanoke, Virginia. Dr. Brown holds a DNP with a concentration in educational leadership from Case Western Reserve University and master’s degrees in Social Work and Divinity. Her clinical background is in home care, hospice, and women’s health. She maintains licenses in nursing, social work and ministry and holds certification in maternal newborn nursing (RNC-MNN) and is a certified nurse educator (CNE). Dr. Brown’s research interests include professional value development, interprofessional education, and collaboration.

Dave Trinkle, M.D., FAPA is currently Associate Dean of Community and Culture, Associate Professor of Psychiatric Medicine, and Program Director of the Geriatric Psychiatry Fellowship Program at Carilion Clinic and the Virginia Tech Carilion School of Medicine (VTCSOM). He is also an Associate Professor with the University Of Virginia School Of Medicine and Via College of Osteopathic Medicine. He is the Geropsychiatric Consultant to the Geriatric Assessment Clinic at Carilion Clinic Center for Healthy Aging, the League of Older Americans, and to numerous Nursing Homes in the Roanoke Valley. He helped develop and lead the Carilion Center for Healthy Aging, a multidisciplinary team based center for geriatric patients and their families, where he is based and continues to actively see and consult patients.

Wilton Kennedy attended Emory University Physician Assistant Program in Atlanta Georgia. Before joining the faculty at JCHS, he practiced primary care for 7 years at Blue Ridge Community Health Center, a migrant and community health center in Hendersonville, N.C. Dr. Kennedy has a strong interest in community health, interprofessional education, global health, and the underserved. He chaired the Physician Assistant Education Association’s Task Force on Interprofessional Education. He currently works in the Emergency Department

**P2-27. The Influence Model of Collaborative Behavior: Collaboration is a Choice**

- **Sara Brown**, Jefferson College of Health Sciences, Roanoke, VA, USA

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Submitted abstract:

**Background:** Interprofessional collaboration is a core competency for healthcare professionals and positively affects patient outcomes (IPEC, 2011; WHO, 2010). Few comprehensive explanatory models fully describe the complexities that influence the practitioner’s choice of collaborative behavior.

**Objectives:** The objective of this presentation is to describe the Influence Model of Collaborative Behavior which is a proposed explanatory model. The model seeks to identify the many factors that affect a healthcare professional’s ability to collaborate effectively.

**Methods:** This model was adapted from Pender’s Health Promotion Model (2011) which was derived from Value Expectancy Theory (Lewin, Dembo, Festinger, & Sears, 1944); theory of Reasoned Action (Fishbein & Ajzen, 1975), and Social Cognitive Theory (Bandura, 1997). The proposed model includes individual characteristics and experiences, behavior specific cognitions, and affect as determinates to collaborative behaviors.

**Results:** The results of the work is a comprehensive explanatory model that identifies the many variables that have shown to influence collaborative behaviors in healthcare professionals. The majority of the components of this model have been tested; however, the model as a whole will need to be further tested to determine its validity.

**Implications:** Further development and testing of the Influence Model of Collaborative Behavior may assist organizations, practitioners and educators assessing the multifaceted environments and personal attributes of healthcare professionals to promote collaborative behavior and ultimately patient outcomes.

**P2:28. Presence of Social Desirability Bias in Learner Attitudes towards Interprofessional Education**

- **Amy Blue,** University of Florida, Gainesville, FL, USA
- **Erik Black,** University of Florida, Gainesville, FL, USA
- **Lou Ann Cooper,** University of Florida, Gainesville, FL, USA
- **Richard Davidson,** University of Florida, Gainesville, FL, USA

Submitted abstract:

**Background:** A common outcome measure for interprofessional education (IPE) programs is learner attitudes towards interprofessional learning. Given that such assessments are often conducted in the context of IPE delivery, it is possible that students respond in a manner that will be viewed favorably by others (e.g., program directors). This tendency, “social desirability bias,” may influence responses to attitudinal instruments.

**Objective:** This study examined the impact of social desirability bias on student responses related to IPE.

**Methods:** A short-form (Strahan & Gerbasi, 1972) Marlowe-Crowne Social Desirability scale (MCSDS) and the Collaborative Health Interdisciplinary Relationship Planning scale (CHIRP) were distributed to 152 health professions students at the end of their participation in a required two-semester longitudinal interprofessional service learning experience. Students completed the CHIRP in a retrospective pre and post-test design; the MCSDS was completed once.
**Results:** 134 (88%) students completed the scales. There was no significant difference in average CHIRP scores pre (X=56.99) vs. post-test (X=58.32) (p = .06). MCSDS scores averaged 5.98 (SD = 2.28, range = 0-10). When MCSDS scores were collapsed into three ordinal categories (below average, average, above average), statistically significant differences were found on the post-CHIRP assessment. Individuals who scored below average on the MCSDS, indicating lower social desirability bias, reported lower CHIRP Post Assessment scores than individuals who scored above average (p<.01).

**Implications:** Findings suggest that social desirability bias may exist in learner responses to post IPE attitudinal assessments. While attitudinal assessments provide programs with information about their impact on learners, more robust measurement of learner outcomes should be used to fully capture learners’ collaborative abilities.

**Author Biographies**

Erik Black, PhD: Dr. Black is a faculty leader in the Office of Interprofessional Education at the University of Florida (UF). A health professions educator with expertise in educational technology, Dr. Black is engaged in several interprofessional education activities at UF and directs the team-based learning and patient safety components of the IPE program.

Richard Davidson, MD, MPH: Dr. Davidson established the interprofessional education program at the University of Florida (UF) in the late 1990’s, creating a unique interprofessional learning-service experience now required across the university’s five health science colleges. He has published several articles about this program. Under his leadership, the IPE program has added more learning components. Dr. Davidson retired from his position at UF as Associate Vice President for Health Affairs – Interprofessional Education in November, 2013.

Amy V. Blue, PhD: Dr. Blue is the Associate Vice President for Interprofessional Education at the University of Florida and has been engaged in interprofessional education (IPE) program development and assessment for several years, including establishment of the IPE program at the Medical University of South Carolina. She was a member of the panel that wrote the core competencies for interprofessional collaborative practice for the U.S.-based Interprofessional Education Collaborative (IPEC).

P2-29. Using Team Based Learning in Interprofessional Education to Promote Content Knowledge and Team Skills

- **Amy Blue,** University of Florida, Gainesville, FL, USA
- **Erik Black,** University of Florida, Gainesville, FL, USA
- **Wayne McCormack,** University of Florida, Gainesville, FL, USA

Submitted abstract:

**Background:** Team-based learning (TBL), a specific pedagogical method, allows for small-group learning within a large group setting, and provides interprofessional education an approach that fosters teamwork in the classroom through a specific, interprofessionally relevant content focus. During 2012-2013, the University of Florida implemented TBL to introduce groups of interprofessional learners to concepts of patient safety, clinical ethics, and population health.

**Objective:** To assess the effectiveness of interprofessional TBL for knowledge acquisition and team skills
application, this study examined students’ knowledge-based performance and self-reports of team-based competencies.

**Methods:** Students from five different colleges (n=639) participated in three half-day learning experiences, each focused on a specific topic. To assess content knowledge at each session, students completed an individual readiness assurance test and then as a group, a team-based readiness assurance test; items were the same items on each test. To assess teamwork skills application at the conclusion of all three sessions, students completed a teamwork instrument composed of three dimensions: contributes to discussion; maintains positive communication; and displays positive attitude. Ratings were 1= never to 5= consistently.

**Results:** Individual student knowledge performance ranged from 47%-63% correct (mean 54%). In concordance with TBL methodology, team scores were statistically significantly higher than individual scores, ranging from 80-83% correct (mean 81%). Mean scores on three teamwork dimensions were: contributes to discussion = 4.86; maintains positive communication = 4.90; and displays positive attitude = 4.89.

**Implications:** Results suggest that TBL can be an effective means of educating interprofessional groups of learners around specific content areas and promoting application of teamwork skills. Importantly, TBL is not faculty resource-intensive. Other educational programs may want to adopt TBL as an approach for promoting interprofessional learning.

**P2-30. Shaping student attitudes towards healthcare teams through a hybrid and an online interprofessional education course: results from a pilot study**

- **Patricia Sanchez-Diaz,** University of the Incarnate Word, School of Optometry, San Antonio, TX, USA
- **Ramona Ann Parker,** University of the Incarnate Word, Department of Nursing, San Antonio, TX, USA
- **Daniel G. Dominiguez,** University of the Incarnate Word, San Antonio, TX, USA

**Submitted abstract:**

**Background:** Creating an IPE calendar that accommodates student schedules from different healthcare programs is difficult especially if the involved professional programs are located on different campuses. Little is known about the effectiveness of online education in meeting the goal of preparing students in the interprofessional competencies.

**Objective:** The purpose of this study was to compare the effects of a hybrid and an online IPE course on student attitudes toward healthcare teams.

**Methods:** Twenty students participating in the hybrid IPE activities completed pre and post-participation measurements. Thirty-one students volunteered for the online IPE activities and fourteen completed pre and post-participation measurements (40% return rate).

Both hybrid and online courses were completed within a mini-semester (eight-week period) and both combined teacher-centered and student-centered approaches. The Attitudes Towards Health Care Teams (ATHCT) Scale survey was used as a pre/post-test measurement to assess the impact of a hybrid and an online IPE course on the attitudes of healthcare professional students.
**Results:** Students in the online course had significantly higher scores on the team efficiency subscale than students in the hybrid course ($F(1,32) = 6.135$, $p=0.019$). Students in the hybrid course had significantly higher “shared leadership” post-didactic subscale scores ($t(19) = -3.209$, $p = 0.05$) while students participating in the online course showed an increase on “team efficiency” score at the end of the program ($t(13) = -2.801$, $p=0.015$).

**Implications:** To our knowledge, this is the first study that compares the effects of hybrid and online IPE courses on attitudes towards health care teams that involves health administration, nursing, pharmacy, physical therapy and optometry students. Future work including a larger number of subjects along with non-IPE professional students as control will enable us to more fully determine the effects of online and hybrid interprofessional education courses on student attitudes towards healthcare teams.

**Author Biographies**

Patricia C. Sanchez-Diaz is an Assistant Professor at the Rosenberg School of Optometry, University of the Incarnate Word, (UIWRSO). Her background is in pediatric cancer gene expression. She teaches anatomy, biochemistry and molecular biology. Her research interests include tumor biology and the scholarship of teaching and learning.

Ramona A. Parker is an Associate Professor in the Ila Faye Miller School of Nursing and Health Professions, University of the Incarnate Word. Her experience includes working with children and their families in the pediatric and neonatal environment. She currently serves as Director of the Simulation Center and teaches in the graduate program.

Daniel G. Dominguez: is an Associate Professor of Health Administration in the HEB School of Business and Administration at UIW and the Director of the Master of Health Administration Program. His current research interests center on program development, leadership/management competency development and assessment, continuous quality improvement in healthcare delivery, and interprofessional education and practice.

**P2:31. A standardized patient case development process for post-licensure interprofessional education**

- **Jason Hickey**, University of Calgary-Qatar, Doha, Qatar
- **Brad Johnson**, Zayed University, United Arab Emirates
- **Mohamed El Tawil**, Hamad Medical Corporation, Doha, Qatar
- **Joanne Davies**, Sidra Medical and Research Center, Doha, Qatar

**Submitted abstract:**

**Background:** The interprofessional education (IPE) literature provides many examples of potentially useful educational strategies. The World Health Organization’s Framework for Action on Interprofessional Education & Collaborative Practice highlights the importance of adult learning methods and contextual learning. Contact theory, interactive learning, professional relevance, cooperative learning, and experiential learning are all commonly cited throughout the IPE literature. One strategy that addresses most of these approaches is case-based learning using standardized patients. However, what seems to missing from the literature is a rigorous process for developing these cases that incorporates educational theory.

**Objective:** The aim of this paper is to describe the development of standardized patient cases for a post-licensure IPE project.
**Methods:** The following 6 steps were taken: 1) Identification of focus areas based on National and Institutional health priorities; 2) Review of pre-existing cases to provide a foundation for case development; 3) Review of the literature for pedagogical/theoretical frames, including consideration of how these could be incorporated; 4) Adaptation of case to incorporate an explicit link between the pedagogical/theoretical frame and stages or aspects of the case, and inclusion/expansion of discipline-specific dimensions for each of the chosen professions; 5) Review of cases by an interdisciplinarity group to elicit feedback and suggestions for revisions; 6) Piloting during four initial IPE workshops to obtain feedback from participants, facilitators, and standardized patients.

**Results:** Strengths and weaknesses of each stage of case development will be discussed. Feedback on cases received during the workshops will also be presented.

**Implications:** Case development for IPE is a complex process that can have implications for stakeholder engagement and learning outcomes. Ensuring the contextual relevance of cases can have positive outcomes, but is not easily achieved. Grounding case development in educational theory and aiming for ongoing improvement, rather than a final product, is one potentially useful approach.

**P2-32. Interprofessional Education in Aging: An Analysis of Exchanges in Student Discussions**

- **Nancy Kropf**, Georgia State University, Atlanta, GA, USA
- **Karen Watkins**, Georgia State University, Atlanta, GA, USA

**Submitted abstract:**
With the growth in the older population, there have been numerous professional efforts to increase the number of students who can effectively practice with older adults and their families. Geriatric Education Centers (GECs) are one mechanism to bring together students in health care fields to learn more about caring for older adults. Within GECs, students participate in programs that help them learn about disciplinary practice as well as how to work as part of interdisciplinary teams.

Within the context of one GEC, this presentation will present a model of interprofessional education to prepare health care practitioners. First year students in three health care disciplines (medicine, nursing, physician assistant program) were combined in groups to have interprofessional dialogues in aging. Prior to learning about the health care issues, students started by learning about older adulthood in general and were paired with an older adult volunteer who served as their mentor. These dyads spent time together in various activities with their mentors such as shopping, doing leisure activities, and going together to a health care appointment. Students discussed their experiences within the interdisciplinary groups by using an electronic bulletin board, and graduate gerontology students facilitated the discussion posts.

Content analysis of the discussion posts indicated that students had an array of experiences with their older mentors that shaped their impressions of aging. While this outcome was positive, challenges were encountered in facilitating dialogue across different disciplinary areas. Using a network analysis, a description of the interprofessional dialogues will be shared. Implications for improving dialogue across the three student groups will be highlighted and explored.
P2-33. An interdisciplinary simulation course for disaster preparedness and management

- Barbara Saltzman, University of Toledo, Toledo, OH, USA
- Brian Fink, University of Toledo, Toledo, OH, USA
- Paul P. Rega, University of Toledo, Department of Public Health & Prevent Medicine, Toledo, OH, USA

Submitted abstract:

**Background:** Interprofessional education and collaboration, is frequently discussed but rarely practiced. The University of Toledo Medical Center has made a concerted effort to bring students and professionals from all health disciplines into collaborative simulation training. We have received internal funding to develop a semester course ‘Interdisciplinary Crisis Management for Medical and Public Health Professionals’ led by an interdisciplinary faculty set from the College of Medicine Departments of Public Health and Preventive Medicine, and the Emergency Medicine. We will train MD, MPH, MSN, and PA students to work together as teams to promote disaster-related population health. Recent history and scientific evidence indicate that American Population Health and medical infrastructure will face increasing challenges, including climate change, terrorism, emerging infections, pandemics, natural and man-made technological catastrophes, requiring proper preparedness and response strategies.

**Objective:** To prepare students to use epidemiologic and disaster medicine principles, and provide essential skills enabling proper functioning during a catastrophic event.

**Methods:** We will discuss recent disaster and epidemic experiences including the 2002-03 SARS epidemic, 2009-10 H1N1 epidemic, 2011 Joplin, Missouri tornado, 2013 Moore, Oklahoma tornado and the most recent May 26–31, 2013 tornado outbreak. Students will be assigned to interdisciplinary teams for the simulated disaster experience encompassing preparation for an impending disaster, management of a hospital evacuation, immediate and longer term post-disaster recovery. The syllabus includes in-person simulation sessions, such as patient evacuation, tourniquet application, and distance learning components including recorded discussions of recent public health emergencies, topics from the Center for Disease Control’s Emergency Preparedness and Response materials, and participation in a web-based Training on the National Incident Management System and the Incident Command System and assigned preparatory readings. Each class meeting will simulate one piece of the disaster experience.

**Implications:** Course participants will leave well-versed and practiced an interdisciplinary approach to managing impending disasters.

**Author Biographies**

Barbara Saltzman, Ph.D., M.P.H. is an epidemiologist and assistant professor in the University of Toledo Department of Public Health and Preventive Medicine. She teaches epidemiology, research and statistical methods to an interdisciplinary student body of Master of Public Health, Physician Assistant Studies, and masters and doctoral level nursing students, both in the classroom and online. She also provides epidemiologic and biostatistical support to student and faculty research activities.

Brian Fink, Ph.D., M.P.H., C.H.E.S. is an epidemiologist and associate professor at the University of Toledo Department of Public Health and Preventive Medicine. He has been involved in interdisciplinary education with a wide variety of students and has assisted with the biostatistics for student- and faculty-
led projects. His work with Drs. Paul Rega and Barbara Saltzman is helping to expand the educational opportunities and job prospects of students.

Paul Rega M.D., FACEP is an assistant professor in the department of public health and preventive medicine as well as in the department of emergency medicine at the University of Toledo. Before his association with UT, he has had a 34-year career in emergency medicine during which time he has been a participant, researcher, and educator in disaster medicine.

P2:34. Bringing the Lab into interprofessional practice: Interprofessional education for Medical Laboratory Professionals through the use of simulation

- Brenda Gamble, University of Ontario Institute of Technology, Oshawa, ON, Canada
- Nancy Bergeron, University of Ontario Institute of Technology, Oshawa, ON, Canada

Submitted abstract:
Background: The Flexner Report released over 100 years ago served as a catalyst to transform medical education from an apprenticeship model to one that incorporated scientific knowledge into a formalized education system. Since that time, clinical education and training programs have continued to evolve to address health system challenges and the expansion of the health and human service division of labour.

Interprofessional practice (IPP) is seen as key to improving health system performance as well as ensuring that patients receive quality care from the right provider at the right time in the right place. Medical laboratory professionals are integral to IPP providing objective data that informs medical decision-making. The successful implementation of IPP is dependent upon changing the way health and human service professionals are educated and trained. This requires a cultural transformation from structure- and process-based education to competency-based education and the measurement of outcomes. Interprofessional education (IPE) is key to this transformation.

Objective: To identify simulated interprofessional learning opportunities for medical laboratory professionals to ready students and practitioners for IPP.

Methods: The development of simulation models was based on an extensive literature review and accomplished in consultation with medical laboratory professionals attending educational conferences.

Results: A variety of IPE models have been developed that incorporate both theory and clinical based learning through classroom experiences (i.e., didactic component), community-based experiences (i.e., service learning component), and/or simulation experiences (i.e., clinical component). Simulation experiences can be grouped into four categories ranging from low fidelity to high fidelity approaches; task trainers, desktop simulation (through Second Life), mannequin-based simulation, and standardized patient. Four specific examples of simulation experiences for medical laboratory training will be presented. Simulation not only provides opportunities for professionals from different backgrounds to train together but can also accommodate the measurement of outcomes and is a vehicle for continuous learning.

P2:35. Learning IPC through the use of online Gaming amongst Medical students

- Carole Orchard, Western University, London, ON, Canada
- Kevin Fung, Western University, Schulich School of Medicine & Dentistry, London, ON, Canada
• Krista Hellem, Western University, Schulich School of Medicine & Dentistry, London, ON, Canada

Submitted abstract:

**Background:** Engaging students from one discipline into interprofessional learning about the roles of other professionals using actual case situation is always a challenge. A novel approach through the use of an online IPE game “Circle of Care” was used with 3rd year medical students who were just beginning their clerkship. This game is comprised of 11 case studies that bring a variety of ‘patient’ stories forward and allow students to challenge each other with three other competing teams to respond to computer generated questions – some related to health challenges in each case, some to the roles of professions involved in addressing these challenges, and others related to generic concepts associated with the case. This learning helps to develop competence in role clarification, team functioning, IP Patient/family centred care; IP communications; and team collaborative leadership. Students were required to submit reflections on their learning from this event. The analysis of their reflections will be provided.

**Objectives:** By the end of this session participants will gain insight into:

How gaming can be used as an IPE approach for students,
- How competencies in IPC can be built into learning,
- How a broad range of case studies addressing different health challenges, settings, gender and age clusters can be addressed within limited time available,
- How gaming can be used to develop IP team working skills,
- How learning can be assessed from the use of such approaches, as gaming.

**Methods:** Participants will be divided into teams of 4-6 persons (depending on number); 3-4 teams will play an abbreviated version of the game during the workshop. An introduction to the development, testing and use of the game will be provided. This will be followed by the game being projected onto the room screens for each set of teams. The ‘mouse’ will be shared with each team as their time to play the game occurs. The team achieving the highest score at the end of the session will be declared the winner. A short discussion on the application of the game to classroom learning will occur followed by a reflection of its learning value.

**Results:** The qualitative thematic analysis of student reflections will be shared. This will be compared with the results of a longitudinal study of these students’ perception of their collaborative team skills and also their socialization into working within interprofessional teams. These data have been collected for each year of their program.

**Implications:** Providing electronic gaming as an IPE learning approach creates opportunities for students to engage in learning across a wide variety of cases in a relative short time. Such an approach assists in developing their team working skills as part of the game play. Furthermore, making such learning a mandatory as part of normal programming requires all students to participate in IPC learning, not just those who have an affinity to such learning.

**P2-36. Building Interprofessional Knowledge through Transdisciplinary Research**

- Danielle Wozniak, University of New England, Portland, ME, USA
- Shelley Cohen Konrad, University of New England, Portland, ME, USA
Submitted abstract:

**Background:** Given the current momentum in health care to both learn from other professions and work collaboratively in teams, it is a natural next step to transcend siloed theories and restrictive research methods towards more synthesized, collaborative research approaches. Transdisciplinary research builds knowledge by systematically engaging a range of theoretical perspectives to address problems affecting individual and population health and health systems improvements. Yet, transdisciplinary researchers encounter attitudinal, linguistic, professional and logistical obstacles. This presentation speaks to these obstacles as well as to the transformative findings generated when many minds collaborate to create new knowledge.

**Objectives:** 1. Describe professional and institutional obstacles that impede transdisciplinary research; and 2. Address methods that counteract these challenges including cross-disciplinary communication, common language, synthesizing scholarship, and bridging professional boundaries.

**Methods:** The presenters will describe a research project that illustrates transdisciplinary research in action. The researchers integrated multiple theories to learn about the needs of women in the aftermath of intimate partner violence. Findings offer guidance to primary care, public and behavioral health, domestic violence advocates, policy-makers, and also to women and families seeking to heal from violence.

**Results:** Knowledge from multiple theoretical perspectives led transdisciplinary researchers to discover new ways of thinking about women’s recovery and healing. Data collected in a community study provided evidence that guides ongoing healing interventions and informs public health and domestic violence policy development.

**Implications:** Transdisciplinary, collaborative research effectively achieves results that cannot be reached when individual researchers study exclusively within their own domains. It is consistent with contemporary trends that promote interprofessional engagement in health and scholarship. Academic institutions, funders, peer-reviewed publications, accreditation organizations and others must promote, value, and credit researchers who engage in joint, transdisciplinary research and scholarship.

**P2-37. Assessment and Evaluation of Interprofessional Education and Care in a Multi-stakeholder Project: CHANNELS**

- Jennifer Morton, University of New England, Portland, ME, USA
- Shelley Cohen Konrad, University of New England, Portland, ME, USA
- Karen Pardue, University of New England, Portland, ME, USA

Submitted abstract:

**Background:** Educating health professionals to deliver safe, patient centered care in fast paced, ever-changing health care systems requires collaborative teamwork that begins in the classroom and translates into the community. While it is well understood that team-based care is good for patients, there is a paucity of literature looking at the evaluative effectiveness that collaborative teamwork has in health care and the future impacts it will make as we navigate through the daunting land of U.S. health care reform.

**Objectives:** The CHANNELS Project (HRSA ;UD7-NEPQR) goals are to develop nurse leaders, educate interprofessional teams of students and train health professionals and community health outreach
workers (CHOWs) to improve health outcomes for Maine’s immigrant and refugee communities.

Methods: The CHANNELS Project is implementing and evaluating a multifaceted approach that includes 1) an integrated curriculum; 2) IPE and TeamSTEPPS® training for community health professionals and cultural navigators, 3) a population-focused nurse leader Institute, and 3) multi-level service delivery through a community based clinic.

Results: The CHANNELS team developed and implemented a comprehensive evaluation plan to measure program specific innovations using reliable and valid tools. Additionally, all UD7 evaluators are working together to develop a standardized evaluation plan utilizing valid tools to measure collaborative team impact aligned with IHI’s Triple Aim. Findings will advance knowledge and inform development of future IPE and IPC programming.

Implications: To fully capture interprofessional collaborative care as best clinical practice, we must embrace interprofessional education as best academic practice. The CHANNELS Project brings IPE/IPC from classroom to community in collaboration with the Immigrant and Refugee communities of Maine, as partners on the health team. Gathering evidence about the efficacy of new models of IPE and IPC in conjunction with triple aim outcomes has critical implications for future health education, practice, and healthcare systems changes.

P2:39. The assessment of interprofesionalism: the use of a Prospective Reflective Portfolio as a Summative Tool

- Sezer Domac, World Health Organisation-International Expert (Turkey), Turkey
- Elizabeth Anderson, University of Leicester, Leicester, UK
- Jenny Ford, De Montfort University, Leicester, UK

Submitted abstract:
Background: Summative assessment strongly influences student learning and there are calls for more research on assessment within IPE (Reeves, 2012). Assessment must be valued both by the student and teacher and demonstrate that learning has taken place. Students require formative assessments for feedback on their development but respond positively to learn material that is summatively assessed and counts towards their professional qualification. Agreement on IPE assessment should be integral to curriculum planning and alignment. We evaluated the use of a personal Portfolio containing students’ analysis of interprofessional learning along their curriculum trajectory (Domac, 2013). This has affirmed the knowledge, skills and attitudes that students develop adding to the literature on competency frameworks and offers a mechanism for summative assessments easily adapted for all professions. Students accept this form of assessment for IPE competence, but more research is required.

Objectives: The workshop will seek to explore the challenges facing participants to ensure the pedagogical shift of including IPE within formal professional curriculum that is assessed and counts towards qualification. Participants will consider the merits of portfolios to collect formative and summative assessments.

The workshop will address the following questions:
- Although IPE is now common sense if we cannot measure it should we be teaching it?
- Although we can clearly measure knowledge how are we measuring skills and attitudes?
• What would a portfolio of assessments look like that confirms a ‘Collaborative practice ready’ student?

**Methods and interactive elements:** The workshop will start with a short presentation of what is currently known on assessment of IPE. Local research on students personal reflective IPE Portfolios will be shared. Participants will then construct a perfect Portfolio with formative and summative elements for IPE assessment. The outcomes and potential research questions will be captured and shared with participants.

**Author Biographies**

Sezer Domac is a qualified social worker. He currently works a senior manager at Social Services (Local Authority), recently obtained his PhD at Leicester University. He is a consultant to provide a variety of deliverable outcomes for the EU-funded projects ‘Promoting Services for People with Disabilities’ in collaboration with the WHO team in Turkey since September 2013. The project beneficiaries of this work have been the Ministry of Health and Ministry of Family and Social Policies.

Liz Anderson, from an early clinical career (nurse, midwife and health visitor) has led innovations in medical education and led the design of an IPE curriculum shared by three universities, in S. Midlands, UK. She is a National Teaching Fellow. She has served on several national boards for the enhancement of professional education (including CAIPE) and has published widely on IPE.

Roger Smith is a Professor of Social Work at Durham University. He is a National Teaching Fellow. He is a member of Academy of Social Sciences, Economic and Social Research Council, Higher Education Funding Council for England.

Jenny Ford worked as a speech and language therapist specialising in children with complex needs before joining De Montfort University to work in pre-registration speech and language therapy education. She has been a key member of the regional Strategic group developing IPE for pre-registration students. She is Operational IPE Lead in the faculty of Health and Life Sciences at De Montfort, a CAIPE Board member and one of the co-ordinators of the CAIPE Student Network.

**P2-40. A Scoping Review of IPE within Canadian Nursing Literature**

• **Rachel Grant**, University of Toronto, Continuing Professional Development, Toronto, ON, Canada
• **Simon Kitto**, University of Toronto, Continuing Professional Development, Toronto, ON, Canada
• **Karen Legrow**, Ryerson University, Toronto, ON, Canada
• **Mary van Soeren**, Dalhousie University, Halifax, NS, Canada

**Submitted abstract:**
The education of Canadian nurses has changed greatly over the last 150 years and has recently expanded to include interprofessional education (IPE). However it is unclear what the impact of this latest curricula innovation is on the professionalization trajectory of Canadian nursing. The purpose of this scoping review is to examine the critical depth and breadth of the existing IPE discourse within Canadian peer-reviewed nursing literature to explore the discussion the Canadian nursing profession is having with itself about IPE. The key areas of inquiry concern how nursing communicates various aspects of the phenomenon of IPE to its own community; IPE’s (un)importance, the nature and purpose of IPE activities, and who is involved in IPE.
Utilizing a modified Arksey\& O’Malley framework for conducting scoping reviews, an electronic database search was conducted using the keywords interprofessional learning, interprofessional education, interprofessional collaboration, and interprofessional care, to identify relevant literature.

The review revealed there is a strong emphasis on integrating IPE into nursing curriculum, particularly at the undergraduate level. However, there was little empirical research, and the majority of articles were either reflective or commentaries. Overall, a lack of critical depth and breadth was found within this body of literature.

Although IPE may be viewed by critical scholars as a means of shifting the control of healthcare delivery traditionally held by medicine, our results do not bear this out. Ironically, the limited number of publications and lack of critical discourse about IPE could result in the Canadian nursing literature actually supporting conventional power imbalances between the health professions. It appears that the nursing academic literature is not purposefully engaging Canadian nurses in a critical discourse. We suggest that a discursive space for critical discussion of the role IPE must be constructed to enable Canadian nursing to continue along the pathway of professionalization.

**Author Biographies**

Ms. Rachel E. Grant is a Registered Nurse who researches health professions education from a nursing perspective. She is currently a Research Associate in Continuing Professional Development, Faculty of Medicine, University of Toronto. Her research interests include interprofessional education, professional power, and the history of nursing.

Dr. Simon Kitto is a medical sociologist who has been undertaking research in interprofessional education, sociology of surgery and health services for over ten years. He is the Director of Research in Continuing Professional Development and an Assistant Professor at the Department of Surgery and a Scientist at The Wilson Centre, University of Toronto. His main research interests are studying how structural, historical and socio-cultural variables shape interprofessional clinical practice, educational settings and activities.

**P2-41. Polarity Thinking: An Essential IPE and IPP Skill**

- Michelle Troseth, Elsevier Clinical Solutions, Grand Rapids, MI, USA
- Tracy Christopherson, Elsevier Clinical Solutions, Grand Rapids, MI, USA

**Submitted abstract:**

**Background/Rationale:** Most healthcare leaders are masters of problem solving. However, the major issues impacting healthcare today are a combination of problems to be solved and polarities to be managed. This calls for new leadership skills and competencies that embrace polarity thinking and Polarity Management™ tools for effective and sustainable transformational change. Specifically for leaders in interprofessional education (IPE) and interprofessional practice (IPP) where great resistance is often met, polarity thinking and tools to manage polarities are critical for success. Polarities are interdependent pairs, united around a common purpose, that need each other to gain and maintain performance over time. Once identified or seen, the qualities of the pairs can be mapped on a Polarity Map, composed of upsides (values) and downsides (fears). The energy inherent in these interdependent pairs can then be tapped to realize the benefits of both sides of the polarity; creating what is known as “both-and” thinking or polarity thinking. Participants introduced to polarity thinking and the tools to
help manage polarities have described it as “life changing” and an essential new skill to lead in an emerging interprofessional world.

**Objectives:**
1. Distinguish between problems to be solved and polarities to be managed
2. Delineate the underlying polarities in IPE and IPP transformative change
3. Experience a polarity mapping exercise related to interprofessional education and practice

**Methods:** Presenters will provide an introduction to polarity thinking, followed by engaging the participants in a series of very interactive activities including: Visualizing polarities in the room; creating example Polarity Maps™; and participating in a collective IP Education and IP Practice Map. This 60 minute interactive workshop also calls for interactive dialogue to tap the wisdom of all participants.

**Results:** The utilization of polarity thinking and creating Polarity Maps™ has proven to be a valuable tool to interprofessional practice and education leaders across North America. A key benefit and result has been providing a tool to help identify the cause of “resistance” when implementing significant change to curriculums and activities supportive of creating an interprofessional environment and approach to patient care delivery. By managing both sides of a polarity to achieve a higher purpose, leaders can identify early warnings indicating they are going into the downside (fears) of a pole as well as identify critical actions steps to maintain positive results to leverage the upside (values) of a pole.

**Implications:** Without new skills to navigate the changes that IPE and IPP create in organizations, the result will be to try to “problem solve” and not achieve the ultimate goal and sustain changes over time. Polarity thinking promises to be an essential tool for leaders of transformational change and to engage all stakeholders in the process.

**Author Biographies**
Michelle Troseth, MSN, RN, DPNAP, FAAN is the Chief Professional Practice Officer for Elsevier Clinical Solutions. She has over 25 years of experience in co-designing and implementing evidence-based practice and technology infrastructures for patient-centered care and interprofessional integration across hundreds of healthcare settings. Michelle provides board leadership for organizations including The TIGER Initiative Foundation and the National Academies of Practice. She has authored several chapters/articles and speaks on professional practice, evidence-based practice, technology and cultural transformation.

Tracy Christopherson, MS, BAS, RRT is the Director of Interprofessional Education and Practice for Elsevier Clinical Solutions. She has been a leader in creating interprofessional practice environments for over 20 years. Her experience comes from coaching and mentoring numerous organizations across the United States and Canada in advancing interprofessional integration and implementing an integrated clinical practice framework to strengthen practice at the point-of-care. She is passionate about bridging the gap between interprofessional education and practice.

**P2-42. Attitude Changes of Students from Various Profession After Participating in Interprofessional Education (IPE) Course, Faculty of Medicine Universitas Gadjah Mada Indonesia**

- **Fitri Arkham Fauziah,** Universitas Gadjah Mada, School of Nursing, Yogyakarta, Indonesia
• Muhammad Zulfatul A’la, Muhammadiyah University of Jember, School of Nursing, Faculty of Medicine and Health Science, Jember, Indonesia
• Fatimah Dwi Astuti, Universitas Gadjah Mada, School of Nursing, Yogyakarta, Indonesia
• Gandes Retno Rahayu, Universitas Gadjah Mada, Departement of Medical Education, Yogyakarta, Indonesia

Submitted abstract:
Background: Collaboration among health care providers is important for improving the quality of care. In order to be familiar with collaboration among health care professions, it is important to learn it as earlier as possible. Nationally, there has not been an IPE program directed to undergraduate students. Earlier survey to 383 medical, nursing, and dietitian students showed good perception and readiness regading IPE. Through focus group discussion, students suggested case discussion mixed with expert tuition were the mots desirable method to implement IPE

Objective: The purpose of this study was explore the attitude toward IPE among various professions in Faculty of Medicine Universitas Gadjah Mada after participating in an IPE program.

Method: This was a quasi-experiment study with pre-post test design. Contents of the course are introduction about competencies of each profession and collaboration aspect in Diabetic Mellitus management with which conducted by lecture, expert panel and case study. The IPE program was then trial to 24 students from medical, nursing, dietitian study programs. Both of vontrol and intervention groups consist of 12 students. Pre and post attitude were measured by questionnaire of Attitude toward Health Care Team Scale who was developed by Heinemann and colleagues in 1999.

Results: There was a significant difference of attitude toward interprofessional education in intervention group between pretest (m=83.75) and posttest (m=89.92) with p value=0.008. Mean while in control group, there was no significant difference score of attitude between pretest (m=78.25) and posttest (m=78.50) with p value = 0.157.

Conclusion: There is a better attitude toward interprofessional education among students after participating in Interprofessional Education program.

P2-43. A literature review on Interprofessional Education in the Western Pacific Region

• Nana Kururi, Gunma University, Maebashi, Gunma, Japan

Submitted abstract:
Background: Interprofessional education (IPE) Networks and Organizations have been established in order to promote and develop IPE for the benefit of patients and clients in the world. In the Western Pacific Region (WPR) there are 37 countries/areas, but there are only a few IPE networks such as Australasian Interprofessional Practice & Education Network (AIIPPEN), Japan Interprofessional Working and Education Network (JIPWEN), and Japan Association for Interprofessional Education (JAIPE). Recently, in the WPR, the fifth All Together better Health (ATBH) conference was held in Australia in 2010, and the sixth ATBH was held in Asia for the first time in Japan. Although IPE is expected to break down professional silos (WHO, 2013), there is not enough evidence that IPE is implemented in the WPR countries/areas besides Australia, New Zealand, and Japan.

Objectives: The purpose of this study was to review literature and answer four questions below.
In the Western Pacific Region,
1. which countries are applying IPE?
2. how do they implement IPE?
3. are there any differences in aspect?
4. is there any evaluations for IPE?

**Methods:** As electric database, we used Cumulative Index to Nursing and Allied Health Literature (CINAHL), IRIS (WHO’s Institutional Repository for Information Sharing), WPRIM (Western Pacific Region Index Medicus), PubMed, Google Scholar. ATBH6 abstract book published in 2012 was also used. At the stage of scanning abstract, only papers written in English were retrieved.

**Main result:** In the WPR, countries/areas which are applying IPE seems to be only Australia, Brunei Darussalam, Hong Kong, Japan, Malaysia, New Zealand, the Philippines, and Singapore. In those countries, IPE has been being implemented in various ways such as group discussions and case studies. There are some evaluation tools for IPE, and most of the measurements evaluate in terms of changes in student attitude or behavior, and these changes are often measured by means of self-report questionnaire or attitude scale.

**Implication:** Language barriers might prevent us from finding the information about IPE in the WPR countries/areas.

**P2-44. Collaborative approach to overcoming legal barriers to IPE in Colorado: focus on pharmacy intern supervision**

- **Kari Franson,** University of Colorado, Skaggs School of Pharmacy, Aurora, CO, USA
- **Marianne McCollum,** Regis University, School of Pharmacy, Denver, CO, USA

**Submitted abstract:**

**Background:** The accreditation standards for most health professions curricula require students to have practical experience in interprofessional (IP) clinical or experiential settings. Current requirements for student pharmacist (SP) intern licensure in Colorado created a regulatory barrier to clinical IP education that required a pharmacist to supervise SPs, thus necessitating a licensed pharmacist for each IP experience where SPs were involved. One example prohibits SPs from discussing a patient’s medication therapy with that patient without the presence of a supervising licensed pharmacist. Legal barriers needed to be overcome to allow for implementation of effective IP clinical experiences and sufficient IP preparation of all clinicians for future practice.

**Objectives:**

- Describe the legal challenge that existed for Colorado’s IP clinical education
- Describe the Colorado strategy and result
  - Identify stakeholders associated with the issue
  - Identify strategies considered to address the challenges, including:
    - Educational options
    - Legislative actions
  - Delineate the risks and benefits of each strategy with respect to each stakeholder
- Report the IP clinical education opportunities that now exist in Colorado for SPs

**Implications:** Addressing legal barriers to IP clinical education legislatively (in addition to educational options) better supports all health professions students in their requirements to learn in new team-
based care delivery models. IPE programs at Colorado health science campuses now exist which provide multiple health care students the opportunity to learn to work together when providing patient care.

P2-45. The Use of the Structure-Process-Outcome Model to Evaluate the Richmond Health and Wellness Program

- **Leticia Moczygemba**, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- **Antoinette B. Coe**, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- **Paul E. Mazmanian**, Virginia Commonwealth University, Richmond, VA, USA

Submitted abstract:

**Background:** Evaluation is required to quantify the impact and sustainability of programs. The Richmond Health and Wellness Program for Older Adults (RHWP) integrates health professions students’ learning with a nurse practitioner-pharmacist-social worker team to provide care coordination and chronic disease management for high-risk older adults who live in a federally subsidized apartment building. At this writing, services have been provided to 102 patients.

**Objectives:** 1) Define an evaluation framework; 2) Identify key evaluation indicators; 3) Identify sources of data; and 4) Generate a sustainability plan.

**Methods:** An evaluation team of clinical experts, fiscal representatives, and health services and educational researchers was assembled. The team selected and applied evidence-based guidelines, validated measures, and accounting principles to create a sustainability framework, including clinical and educational programs. Population characteristics, including age and literacy level, were considered to tailor the evaluation plan. The team also reviewed data sources that were available to support the desired outcomes.

**Results:** The Donabedian Structure-Process-Outcome (S-P-O) Model was chosen as the evaluation framework. Structure measures include documentation of the type and number of personnel providing care. Process measures include an assessment of preventive care adherence and care coordination activities such as number of patients up-to-date with recommended immunizations and frequency of communication between providers. Clinical outcomes data including serial A1C assessments and adherence to ACOVE indicators for frail older adults will be reported. Patient satisfaction will be measured using qualitative (interviews/focus groups) and quantitative (survey) methods. Financial outcomes include emergency department transports and reasons for use to determine potential cost avoidance. Patient self-report, electronic health records, and claims data will be used as data sources.

**Implications:** A robust evaluation plan was developed using the S-P-O Model that combined multiple data sources. The plan will allow project stakeholders to demonstrate the sustainability and impact of RHWP.

**Author Biographies**

Leticia R. Moczygemba, PharmD, PhD is an Assistant Professor, School of Pharmacy, Virginia Commonwealth University. Her research focuses on working with marginalized groups to improve medication-related health outcomes. She has developed and evaluated interdisciplinary care models to improve health outcomes using patient-centered strategies that facilitate self-management of chronic
diseases. Dr. Moczygemba received her PharmD and PhD from The University of Texas in 2004 and 2008, respectively.

Antoinette B. Coe, PharmD is a doctoral graduate student in the Department of Pharmacotherapy and Outcomes Science at VCU School of Pharmacy and a graduate research assistant with the Office of Assessment and Evaluation Studies, VCU School of Medicine. She received her PharmD from VCU in 2009 and completed a Community Pharmacy Practice Residency with VCU School of Pharmacy in 2010. She is a 2013-2014 American Foundation for Pharmaceutical Education Pre-Doctoral Fellow in Pharmaceutical Science.

Paul E. Mazmanian, PhD, Professor of Family Medicine and Population Health, Virginia Commonwealth University, serves as Associate Dean, Assessment and Evaluation Studies, School of Medicine; and Director of Evaluation, VCU Center on Clinical and Translational Research. He is a member of the Institute of Medicine, Standing Committee on Credentialing Research in Nursing.

**P2-46. Developing a measure to assess student confidence to engage in Interprofessional Education**

- **Sharron Blumenthal**, Glasgow Caledonian University, Glasgow, Scotland, UK
- **Keith Stevenson**, Glasgow Caledonian University, Glasgow, Scotland, UK
- **Nicola McLarnon**, Glasgow Caledonian University, Glasgow, Scotland, UK

**Submitted abstract:**

**Background**
Factors such as age, professional identity, learning orientation, gender, and professional grouping have been postulated as reasons for variances in health and social care students’ perceptions of, and readiness to engage in Interprofessional Education (IPE). Academic behavioural confidence also influences student perceptions of study experiences; however, it is unknown if academic behavioural confidence influences student perceptions and readiness to engage specifically with Interprofessional education. Currently no measure for Interprofessional education related academic behavioural confidence exists.

**Objectives:** To develop a questionnaire to ascertain the confidence of Health and Social Care students to engage in Interprofessional Education.

**Methods:** A mixed method qualitative-quantitative sequential design (being undertaken in a purposive sample of first year BSc health and social care students within the School of Health and Life Sciences at Glasgow Caledonian University) will be presented. Phase 1 of the study looked at instrument development and utilised thematic analysis to code focus group data as a method to explore face validity of questionnaire domains and questionnaire development, phase 2 of the study involved the psychometric testing of the questionnaire once it had been developed.

**Results:** Themes identified as a result of coding the focus group data will be presented and how this information was then used in the questionnaire development will be presented. Data from phase 2 of the study in relation to psychometric testing will also be discussed.

**Implications:** The development of an IPE-specific academic behavioural confidence questionnaire could be utilised to assess the outcome of interprofessional related activities; in addition to serving as
a ‘screening tool’ to identify students requiring additional support with interprofessional related activities

P2-47. The New Psychometric Analysis of Dual Identity Scale

- Hossein Khalili, Fanshawe College, London, ON, Canada
- Carole Orchard, Western University, London, ON, Canada
- Heather Laschinger, Western University, London, ON, Canada
- Randa Farah, Western University, London, ON, Canada

Submitted abstract:
The dual identity scale (DIS) is a 30-item scale that was developed through adaptation from two other instruments including: the Healthcare Stereotype Scale (Carpenter, 1995) and Multi-group Ethnic Identity Measure (Phinney, 1992). This scale with its four subscales is measuring the development of dual professional and interprofessional identity as an outcome of interprofessional socialization. This scale was validated during the author’s dissertation study. The initial psychometric analysis indicated that the reliability of the scale and its subscales, using the Cronbach’s alpha, ranged from 69-88%. The construct validity using factor analysis illustrated that the 4 subscales (Interprofessional Belonging; Professional Belonging; Dual Identity Achievement; Cross-disciplinary Attitudes) were explaining for 51% of the total variance of the scale. The DIS was further employed in a simulation research project among 96 participants. In this presentation the new psychometric analysis of the scale, which is in progress, will be presented.

P2-48. From Curriculum to Application to Practice: Building Evaluation Bridges in a Longitudinal Interprofessional Program

- Elshimaa Basha, University of Colorado, School of Medicine, Aurora, CO, USA
- Kirsten Broadfoot, University of Colorado, School of Medicine, Aurora, CO, USA

Submitted abstract:
This poster presents evaluation data from a new longitudinal series of evaluation tools on learners’ knowledge retention and use of interprofessional skills in simulated clinical practice scenarios and the challenges faced in their design.

As the interprofessional teamwork skills application component of a longitudinal interprofessional curriculum Clinical Transformations on the Anschutz Medical CampusT acts as a bridge for learners from classroom conceptual learning to real-life applications in clinical settings.

For the first two years of the program, pilot data captured teams’ application of the four key principles of TeamSTEPPS: Team Structure and Leadership, Situation Monitoring, Mutual Support and Communication. While results showed a gain in content knowledge and increase in the application of TeamSTEPPS domains in a simulated scenario, post-assessment and a second round of observational checklist results were positively skewed. Observation tools did not address specific teamwork tasks and processes either. As a result, the pre and post assessment tools did not correlate to provide meaningful data.

To address these issues, the four assessment tools were benchmarked with instruments used at local and regional institutions such as the University of Washington and Colorado State University and redesigned. Current tools include an individual conceptual quiz pre-entry to CT, real time observational
checklists for team briefs, scenarios, and debriefs; immediate individual and team evaluations of performance post-CT experience; and individual evaluation of knowledge retention and application of teamwork concepts as well as evaluation of interprofessional skills in current clinical teams 6 months post CT.

Preliminary data demonstrates that high performing teams constitute 36% of the sample. 22% of teams have been rated as above average and 31% average. Only 9% of the total teams fell below average. Pre and Post assessment data also indicates that team members demonstrate an above average understanding of teamwork concepts and skills (90% f level).

**Author Biographies**
Kirsten J. Broadfoot, PhD, is an Associate Professor of Family Medicine at the University of Colorado Anschutz Medical Campus. She is also the Assistant Director of the Center for Advancing Professional Excellence for the University of Colorado School of Medicine and Associate Director of Communication for the Foundations of Doctoring Curriculum. In these roles, she assists with communication skills development and interprofessional education and practice across the health sciences campus.

El-Shimaa Basha, B. S., is a Clinical Simulation Educator with the Center for Advancing Professional Excellence for the University of Colorado Anschutz Medical Campus. She is Project Coordinator for the Interprofessional Education and Development Curriculum Phase 2 Component: Clinical Transformations where she is responsible for case design, simulation scenario design and training and curriculum innovations.

**P2-49. Factors which influences on Nursing Students’ Experiences in an Inter-professional Clinical Study Unit.**

- **Iben Boegh Bahsen**, University College Nordjylland, Department of Nursing, Aalborg, Denmark
- **Hanne Lisby**, Aalborg University Hospital, Department of Orthopaedic Surgery, Aalborg, Denmark
- **Ingrid Maria Sørensen**, University College Nordjylland, Department of Nursing, Aalborg, Denmark
- **Mette Braad**, University College Nordjylland, Department of Nursing, Aalborg, Denmark

**Submitted abstract:**
**Background:** Length of hospitalization is reduced demanding effective and timely interventions from all health professions. In an Inter-professional Clinical Study Unit (ICSU) students have the opportunity to develop inter-professional competencies. Nevertheless some nursing students have commented that staying in an ICSU is an interruption in their final clinical placement with limited learning possibilities.

**Aims:** The aim of the study was to explore nursing students’ experiences of taking part in an ISCU.

**Objectives:** A total of 40 nursing students met the inclusion criteria: students had passed the final clinical placement and had stayed in the ICSU for 14 days during the final clinical placement. Of these, 14 students were randomly selected and invited to participate in the study; nine students accepted to participate. These students were randomly divided into two groups.

**Methods:** The Study was qualitative with explorative, descriptive and interpretive aspects. Data were
collected among nursing students by focus group interviews.

**Results:** Nursing Students increased knowledge of both own and other professions. Similarly they realized the importance of inter-professional teamwork. However, they problematized that it was difficult to see the relevance and to integrate the stay at ISCU in their final clinical placement. Moreover, students spent a considerable amount of time on basic nursing tasks during their stay at the ISCU; skills already acquired earlier in their education programme.

**Conclusion and Implication:** Staying in an ICSU improved inter-professional collaboration skills. It is however, important for as well the theoretical as clinical part of the educational program, to stress the importance of basic nursing tasks being the foundation for nursing assessments in the final part of the education. Several initiatives have been made in order to make a better connection between the ordinary clinical placement and the stay in the ICSU.

**P2-50. Experiences of Evaluating IPE: A Ten Year Longitudinal Study**

- **Sundari Joseph**, Robert Gordon University, Aberdeen, Scotland, UK
- **Lesley Diack**, Robert Gordon University, Aberdeen, Scotland, UK

**Submitted abstract:**

**Background:** An IPE programme delivered across two universities and ten professions within an urban location. Pre and post RIPLS data were used to evaluate student and staff perceptions of the programme between 2003-2010. Whilst this data provided valuable information on the content, delivery and its impact on student perceptions it fell short of evaluating key aspects of impact.

**Objectives and Methods:** An IPE Research team comprising the lead academic for IPE and research experts from the disciplines represented on the IPE programme designed an evaluation strategy using a Donabedian model of structure; process and outcome. ‘Structure’ referred to evaluation at the time of an IPE event; ‘process’ to the end of a year’s evaluation and ‘outcomes’ to the new graduates experience of interprofessional working and the impact of the IPE on their practice.

**Results:** Findings from these evaluations will be presented. The student cohorts were 800-900 approx and quantitative and qualitative data were analysed and themes emerged. By asking the same questions at each stage of the Donabedian process key areas of IPE impact were investigated. These included team communication; professional roles and responsibilities and the patient/client experience. The findings from the RIPLS data and the Donabedian evaluation will be compared to enable the presentation of a ten year longitudinal study of staff and student perceptions.

**Implications:** The evaluation strategy described in this presentation has implications for educators designing IPE programmes. It provides a useful model for evaluating IPE at different stages of the students’ experience enabling triangulation of the findings and providing robust and rigorous evaluation.

**P3-1. Geriatric Assessment Interdisciplinary Team Program – An Interprofessional Training Opportunity in Geriatric Care**

- **Reba Cornman**, University of Maryland Baltimore, Baltimore, MD, USA
- **Terri Socha**, Western Maryland Area Health Education Center, Cumberland, MD, USA
- **Lisa Widmaier**, Eastern Shore Area Health Education Center, Cambridge, MD, USA
Submitted abstract:
For the past 18 years, the Geriatric Assessment Interdisciplinary Team (GAIT) Program has provided one or two day interprofessional, geriatric/team training programs for more than 14 health professional, social work and law programs within the University of Maryland System. The program is the result of a partnership between the University of Maryland Baltimore’s Geriatrics and Gerontology Education and Research Program and the Eastern Shore and Western Maryland Area Health Education Centers. In addition to the program offering both interprofessional team and geriatric training, each session is located in a rural geriatric care facility which features a care specialty – for example = dementia care, geriatric rehabilitation or palliative care.

Each GAIT Program agenda features both didactic and clinical experiences for no fewer than three professional disciplines. In many cases, this will be the first interprofessional experience for the students who are guided through each GAIT by its coordinator and by the professional team hosting each rotation. GAIT has been embraced by faculty and students as a successful introduction to team training, geriatrics and rural care. The oral session will summarize the program and report on short term program outcomes.

P3-2. Interprofessional Student Placements in Subacute Care

- **Terrie Simpson**, Western Australia Training Centre in Subacute Care, Shenton Park, Western Australia, Australia
- **Jenny Langley**, Western Australia Training Centre in Subacute Care, Shenton Park, Western Australia, Australia
- **Margo Brewer**, Curtin University, Faculty of Health Sciences, Perth, Western Australia, Australia

Submitted abstract:
Interprofessional collaboration includes not only the professional voice, but the client voice as a true partner in governance, program and policy development and their implementation. At the Centre for Addiction and Mental Health (CAMH) in Toronto, Ontario, client participation has been enshrined in the support of an autonomous client organization that participates at all levels of the organization. This involvement is crucial because clients have a right to participate in decision-making because of the immense effect treatment organizations can have on their lives. Peck et al., (2002) noted that while a start had been made, changes were superficial and unlikely to ever result in significant increases in the power of people with mental illness. We would argue that at CAMH, this has not been the case.

CAMH has a Clinical Care Committee, comprised of health professionals of varying disciplines, including clinicians, legal counsel, bioethicist and the Coordinator of the CAMH Empowerment Council (EC). The EC is the organization which represents the voice of clients at CAMH. In this oral presentation we will demonstrate how client participation has evolved from minimal to significant influence in the development of policies which have led to significant practice change and enhanced collaboration among professionals and clients. The benefits of authentic client engagement will be demonstrated with examples where practice change has been realized. For example, following an inquest a policy governing the use of Restraint and Seclusion grounded in a philosophy of least restraint and client empowerment was developed at CAMH. The results from the implementation of this policy will be presented.

Using an interactive discussion format presenters will take audience members through two examples of effective policy development incorporating the client voice. Major features necessary for meaningful involvement will be offered with supporting evidence.
**Author Biographies**

Jennifer Chambers is Coordinator of the CAMH Empowerment Council. In the last 25 years has developed five organizations that have served to represent people who had been lacking a voice, creating changes from organizational policy to legislation.

Wendy MacLellan is the Policy and Procedures Coordinator at CAMH. In this role, she oversees the development, approval and revision of all hospital wide policies and procedures. A key part of this role is participation in the clinical care committee and collaboration with members of the empowerment council.

Jane Paterson is the Director of Interprofessional Practice at CAMH. In this role she is engaged in the development and implementation of corporate clinical policies. She is also involved in creating structures within the organization that support interprofessional collaboration and education.

**P3-3. The current state of nursing roles in team-based medical practice**

- **Tomoko Hayashi**, Mie University, Tsu, Mie, Japan
- **Kazumi Imura**, Mie University, Tsu, Mie, Japan

**Submitted abstract:**

With the advancement of medical technology, a team-based approach has become increasingly important in the medical treatment of patients. In such a circumstance, nursing research on team-based medical practice is developing.

Based on the above facts, this study aimed to identify the current status of nursing roles and issues by reviewing the literature. By doing this, we can help nurses become aware of their roles in team-based medical practice.

We searched the literature published over the past 10 years using Japan’s medical literature database, with “team-based medical practice” and “nurse” as key words. Of the 399 articles selected, we analyzed 32 articles that described nursing roles and issues in team-based medical practice.

We also identified “appropriate staffing allocation”, “cooperation between medical and nursing care providers”, “collaboration between nurses and physicians”, “acting as a spokesperson for a multidisciplinary professions”, “developing a team”, “mutual communication beyond professions and job titles”, and “acting as a team coordinator by utilizing professional knowledge and skills” as nursing roles required in team-based medical practice.

The following problems with team-based medical practice were reported: Cooperation and collaboration among multidisciplinary professionals, obtaining organizational support, exerting one’s skill in team-based medical practice, increasing a team’s motivation, taking the initiative in team-based medical practice, and respecting other professions. Particularly, cooperation and collaboration among multidisciplinary professionals was reported as a common problem in some articles.

**P3-4. Making interprofessional teams work: Lessons learned from a neonatal intensive care unit**

- **Myuri Manogaran**, University of Ottawa, Ottawa, ON, Canada
- **Brenda Gamble**, University of Ontario Institute of Technology, Oshawa, ON, Canada
Submitted abstract:

**Background & Objective:** Interprofessional collaboration (IPC) occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care”. Successful discharge planning for patients from hospitals is dependent upon IPC. The purpose of this study was to identify and examine barriers or facilitators to IPC as it pertains to discharge planning on a neonatal intensive care unit (NICU).

**Methods:** Healthcare workers on a NICU at a large Canadian teaching hospital were surveyed to determine their views on the discharge planning process, leadership, and IPC. Participant observations took place during the weekly IPC rounds to observe the healthcare workers when discussing discharge plans. Based on these observations, 10 health care workers were selected to interview to gain a more in depth understanding of IPC in the discharge planning.

**Results:** Survey results (n=66) indicate that the majority of healthcare workers on the NICU are supportive of IPC. However, the interview data demonstrated that problems arose during an emergency discharge - when an existing patient on the NICU is discharged to provide a bed for a new admission. The lack of effective communication, role clarity issues, and a need for mutual respect were identified as barriers to the full participation of all members of the interprofessional team (IPT) in an emergency discharge. Experience in the profession, experience working on IPTs, and educational preparedness were identified as indicators of the level of involvement of healthcare workers in IPC. Participants identified the need for an IPC leader, responsible for facilitating discharge planning information amongst the IPT.

**Conclusion:** Defining the context is important; experience matters when it comes to how confidently professionals can carry out IPC. The medical lead is responsible for making the decision about a discharge. However, an IPC leader was identified as responsible for ensuring information from IPT members is accessible to the medical lead.

**P3-5. Improving Diabetes Outcomes with Interprofessional Teams: A Model for Primary Care**

- **Monica Ramirez,** University of the Incarnate Word, San Antonio, TX, USA
- **Matthew Walk,** University of the Incarnate Word, San Antonio, TX, USA
- **Decima C. Garcia,** University of the Incarnate Word, San Antonio, TX, USA
- **Ramona Ann Parker,** University of the Incarnate Word, Department of Nursing, San Antonio, TX, USA

Submitted abstract:

**Background:** Few studies demonstrate the effect on patient outcomes of care by an interprofessional team. An evidence based review to determine effectiveness of practice based interprofessional collaboration between two or more types of healthcare professionals found some support that interprofessional team-based interventions leads to improvements in patient care (drug use, length of hospitalization, hospital cost). Generalization was limited by the small number of studies (5), small sample sizes, and heterogeneity of interventions and settings (Zwarenstein, Goldman, Reeves, 2009). Most studies of interprofessional teams have occurred in hospital settings; few describe challenges and outcomes of team care in primary care settings.
Objectives: 1. To establish an interprofessional faculty practice team within a Federally Qualified Health Center (FQHC) located in South Central Texas. 2. At the end of 3 years, parameters of sustainability for the IPCP Mini-Team care and UIW IPCP Faculty Team care of diabetic patients at the FQHC will be developed.

Methods: A faculty team of nursing, pharmacy, physical therapy, health administration and optometry built on existing primary clinic resources to 1) develop a clinic triage system for diabetic patients into low, moderate and high risk; 2) implement a referral system for team care; 3) develop care coordination plan, including home visit and clinic setting assessment; 4) emphasize patient self-management strategies; and 5) coordinate team follow along care via team conferences.

Results: The presentation describes the implementation of a community-based team model in a primary care setting and summarizes changes in patient HgbA1c and selected clinical metrics in relation to cost/benefit during the first two years of the project.

Implications: An IPCP model of patient-centered care coordination nested within the comprehensive services of an FQHC can serve as the template for replication of interprofessional collaborative in a primary care setting.

P3-6. Managing Traumatic Injury in Ice hockey: An On Ice Simulation Exercise
  • Christopher Rizzo, University of New England, Biddeford, ME, USA

Submitted abstract:
Background: In many health care fields, opportunities for students and professionals to practice clinical skills on actual patients are often limited to the incidence of injury. Although there are benefits to mock scenarios, it often occurs in the context of a sterile environment. In these cases, the encounter fails to fully replicate a real life situation and as a result, fails to adequately challenge the student or professional.

Objectives: The primary objective of this project was to provide professionals and students with a demonstration of a simulated patient encounter and the associated team work and communication opportunities which emerge from using a high fidelity mannequin. The other objective was to identify opportunities for future simulation exercises involving students and health care providers.

Methods: This project included, Athletic Trainers, Emergency Medical Technicians, and Athletic Training Students providing emergency care to a spine injured “athlete”. Through the use of a 3G patient simulator, dressed in full hockey equipment from helmet to skates and lying on the ice, complexity was added to the task by challenging the participants with a simulated cardiac arrest. The encounter was followed by a debriefing session where the participants had the opportunity to reflect, express their thoughts on the experience and provide feedback. Outcomes were obtained via participant surveys and open-ended questions on the course evaluation.

Results: Participants rated the session favorably. Several participants indicated interest in facilitating team development and highlighting the roles and practices of effective teams. Open-ended comments reinforced this trend to the extent of engaging other health professionals in the development of simulations.
**Implications**: Future exercises will provide participants with an opportunity to practice injury management skills as well as an experience that will lead to improved team work and communication.

**P3-7. The Project for Integrative Health and the Triple Aim (PIHTA): A Case Study on Sharing Supportive Evidence & Collaborating on Best Practices**

- **Barb Reece**, Academic Consortium for Complementary and Alternative Health Care, Seattle, WA, USA
- **John Weeks**, Academic Consortium for Complementary and Alternative Health Care, Seattle, WA, USA
- **Deborah Hill**, Academic Consortium for Complementary and Alternative Health Care, Seattle, WA, USA

**Submitted abstract:**
In recent years, payment incentives imbedded in new models of health care delivery reward those who achieve the goals of the Triple Aim. These goals align closely with the values of integrative health: treat the whole person, support self care, use least invasive treatments first, partner with others and create health. This alignment signals an unprecedented opportunity to include members of the licensed, integrative health professions on interprofessional teams. The challenge is that few integrative health practitioners are familiar with the language and culture of the ACO or PCMH. Even fewer mainstream healthcare decision-makers are aware of the potential for including these practitioners on their teams or know where to find credible information about the value they offer.

This presentation describes an initiative launched late in 2013 by an interprofessional collaborative, representing national academic organizations from five licensed integrative health and medicine disciplines, to address these challenges. PIHTA is housed in the Center for Optimal Integration, a web-based platform that serves as a virtual gathering place for anyone with a stake in the integrative health movement. The Center:

- Aggregates and disseminates practical information on how to ‘do’ integration in health care
- Engages a diverse group of stakeholders in collaborative communities of learning
- Helps prepare individuals and organizations to be leaders within the integrative health movement

PIHTA’s success will be measured by its utility, dynamism, and value to stakeholders. By operating as a ‘living laboratory’ for integrative health in the ACO/PCMH environment, we will continuously gather input, coalesce and disseminate evaluation results, and create a knowledge feedback loop for end users.

More than a learning hub for leaders who already champion integrative care in the emerging healthcare marketplace, PIHTA will drive skill-building among academics and clinicians who are preparing for patient-driven practice in the 21st century.

**Author Biographies**
Barb (Findlay) Reece, a senior healthcare consultant, has worn several hats in the course of her career – registered nurse, educator, administrator and researcher/writer. A seasoned ‘change agent’ and published author; she has extensive experience leading integrative health care initiatives in both Canada and the US. She currently works on special projects for the Academic Consortium for Complementary and Alternative Healthcare, including the Center for Optimal Integration and PIHTA.
John Weeks is a leading organizer of multidisciplinary and multi-stakeholder initiatives in the emerging integrative health and medicine field. He developed the Integrative Medicine Industry Leadership Summits, fund-raised the start-up of the Integrative Healthcare Policy Consortium, directed the National Education Dialogue to Advance Integrated Health Care, and co-founded and currently directs ACCAHC. Weeks advised on integrative health matters for NIH NCCAM, BPHC, WHO, Health Forum, and the HRSA-funded Integrative Medicine in Preventive Medicine.

Deborah Hill is the lead resource developer and organizer for the PIHTA project. Following a MS in Chemistry she spent more than ten years in medical sales which gave her a deep understanding of challenges facing healthcare providers and incited a desire to change the way health is defined. Deb completed a second Masters in Physiology and Biophysics with a focus on complementary and alternative medicine at Georgetown University.

P3-8. Can we bring the patient and family into the interprofessional care team? Utilising patient satisfaction data to interrogate interprofessional care

- Sarah McMillan, University of Toronto, Continuing Professional Development, Toronto, ON, Canada
- Eman Leung, University of Toronto, Continuing Professional Development, Faculty of Medicine, Toronto, ON, Canada
- Simon Kitto, University of Toronto, Continuing Professional Development, Toronto, ON, Canada

Submitted abstract:
Patient satisfaction surveys are mandated in Ontario Hospitals through the Excellent Care for All Act (2010), yet patient experience beyond overall satisfaction scoring is rarely examined. Exploring patients’ written comments on the survey can help uncover what excellent care means from a patient perspective and provide insight into the provider-patient relationship.

One year of survey data with an overall patient satisfaction score of “excellent” and “fair/poor” was collected from a single Toronto hospital. Data was further narrowed to only include patients’ written comments regarding their inpatient hospital stay. Conventional content analysis was utilized to inductively examine patients’ experience.

Five themes affecting the patient experience emerged: 1) provider behavior; 2) provider-patient communication; 3) coordination of care; 4) efficiency of care’ 5) basic needs, with the first two themes being the strongest. The significance of the provider-patient relationship was highlighted within the findings as patients frequently commented on their experience with providers. At times patients’ perceptions of provider roles were unclear. Additionally, family members self-identified as filling out surveys on behalf of patients, reinforcing their importance within the care team.

Interrogating patient satisfaction data in terms of patient-provider relationships has important implications for shaping interprofessional research and practice. Future research should examine the consequence of provider role-confusion for effective interprofessional care interactions. In terms of practice, greater attention by hospitals should be directed to how family member involvement might be used to alleviate patient provider-role confusion, as well as enhance interactions with interprofessional teams. We also suggest patient satisfaction data collection methods should be refined in order to gain more utilizable patient-centric information on factors that shape patients’ experiences and perceptions.
of interprofessional care interactions. In sum, patient satisfaction data has the potential to be used as more than just a hospital reporting metric for governmental institutions.

Author Biographies

Sarah E. McMillan is a Research Associate in Continuing Professional Development, Faculty of Medicine at the University of Toronto and specializes in incorporating the patient and family perspective within health research. She holds a Master of Arts in Sociology from Wilfrid Laurier University with a background in the critical analyses of health, illness, medicine and disability. She is passionate about combining her previous patient advocacy work with her scholarly pursuits.

Dr. Eman Leung is an applied psychologist with advanced training in statistical modelling, psychometrics, social epidemiology, and naturalistic verbal and non-verbal behavioural observations. He is Quality Improvement Scientist and Associate Director of Research at Continuing Professional Development, Faculty of Medicine at University of Toronto. He has worked with acute care hospitals, long-term care facilities, social services, mental health centres and not-for-profit organizations to improve care quality through knowledge translation.

Dr. Simon Kitto is a medical sociologist who has been undertaking research in medical education, sociology of surgery and health services for over ten years. He is the Director of Research in Continuing Professional Development and an Assistant Professor at the Department of Surgery and a Scientist at The Wilson Centre, University of Toronto. His main research interests are studying how structural, historical and socio-cultural variables shape interprofessional clinical practice, educational settings and activities.

P3-9. Provision of Interprofessional Healthcare Services for Bariatric Patients

- April Newton, Des Moines University, Des Moines, IA, USA

Submitted abstract:

Background: There has been a growing epidemic of obesity in the United States in the past two decades with 30% to 50% of Americans currently obese. For healthcare institutions and providers, this patient population is requiring a change with the delivery of care provided and the design of equipment utilized. In theory, creating larger spaces and ordering bariatric equipment seems easy, but it can be difficult to achieve. Healthcare providers also need education for sensitivity training, safe handling techniques, and injury reduction measures. And, the patient needs are central to the process.

Objectives

1. To provide insight into the healthcare climate of delivering interprofessional care to the bariatric patient.
2. To explore ways to thoughtfully accommodate the bariatric patient.
3. To discuss the financial implications associated with the bariatric population.

Methods: The discussion is predicated on a literature review exploring how the bariatric population is leading healthcare organizations to review equipment and supply needs as well as incorporate interprofessional strategies to care for this patient population.
**Results:** Obese patients tend to delay seeking medical care because they are either self-conscious about their weight; they fear negative comments from healthcare providers and staff; or they have encountered negative experiences from previous appointments or hospital admissions. With the trend toward obesity and the increase in bariatric programs rising, clinics and hospitals need to begin planning their renovations, equipment purchases, and educational and training programs to be part of their short and long term strategic and financial plans.

**Implications:** If current trends continue, total healthcare costs attributable to obesity could reach $861 to $957 billion by 2030, 16% to 18% of US healthcare expenditures. And, the cost of caring for an obese patient is an average of 37% more than a person of normal weight, over $700 annually per patient.

**Author Biographies**
April DS Newton, PT, DPT, is the Director of Clinical Education and an Assistant Professor in the Doctor of Physical Therapy at Des Moines University, Des Moines, IA. Dr. Newton is currently a PhD student in the Interprofessional Studies program at Rosalind Franklin University of Medicine and Science, Chicago, IL.


- **Christine Deschamps,** UPMC, University of Pittsburgh Physicians, Pittsburgh, PA, USA

Submitted abstract:
**Background:** Aspiration is a source of serious illness and death, often requiring aggressive, prolonged inpatient hospital management. In 2008, aspiration events occurred in 2.3% of all admissions to select hospitals at UPMC; 18% of those died during the same hospitalization. The impact extended beyond the hospital stay with 30-day readmission rates of 21.2%.

**Objective:** Improve provider, patient and family understanding of aspiration reduction measures by addressing knowledge, communication and standardized process.

**Methods:** Multidisciplinary approaches, based on comprehension and scope of practice, were designed utilizing quality improvement methodology in which the current state of each workflow process was evaluated through observation, interviews and surveys. Each discipline proposed solutions to improve deficiencies and developed a frontline plan to achieve improvement. The plan was driven using small, measurable rapid-cycle testing.

**Results:** Through a series of didactic modules, nurse-level understanding of basic aspiration precautions improved from 40% to 80%. Through admission screening and immediate communication of risk to the MD, time to obtain speech pathology consultation reduced by 43% and appropriate diet ordering improved by 72%. At the patient level, 10% of patients identified as at-risk by providers were unaware of their risk for aspiration; use of head of bed signs increased personal awareness of risk to 90%. Head-of-bed signs also empowered visitors to be patient advocates, intercepting inappropriate delivery of food and drink. Post-discharge interviews revealed significant knowledge deficiencies of preventative measures, proper diet and behavior modification. A standardized discharge toolbox was implemented and resulted in 98% of aspiration-risk patients or their caregivers subsequently able to define aspiration; 91% knew prescribed dietary restrictions; and 84% recalled three preventative safety measures.
**Implications:** Efforts to improve patient outcomes enabled providers and patients to better mitigate aspiration risk in the hospital and at home, ultimately minimizing aspiration events and recidivism.

**Author Biographies**
Christine Deschamps is a registered nurse licensed in Pennsylvania. Her expertise covers 30 years of frontline and leadership roles in prominent health systems. She holds a BS degree in Nursing and a MS degree in Leadership and Business Ethics. In 2012, she earned certification as a Six Sigma Green Belt. Presently, as a Clinical Improvement Specialist with the University of Pittsburgh Physicians, Department of Cardiothoracic Surgery, she manages an initiative to prevent hospital-associated pulmonary aspiration.

**P3-11. Interprofessional Family Reviews: Interprofessional Support for Community Health Worker Roles**

- **Emily Akerson,** James Madison University, Harrisonburg, VA, USA
- **Doris Glick,** University of Virginia, Charlottesville, VA, USA
- **Catherine Kane,** University of Virginia, Charlottesville, VA, USA
- **Linda Bullock,** University of Virginia, Charlottesville, VA, USA

**Submitted abstract:**
**Background:** Healthy Families is an evidence based national program model which provides education, resources and support for the most vulnerable first time parents through intensive home visiting by trained community health workers. An interprofessional practice model is a successful, innovative, supportive, and cost effective way to achieve program and family goals. It is a voluntary, strength based program with the following goals:
- Achieve positive pregnancy, maternal and child health outcomes.
- Promote optimal child development.
- Encourage positive parenting.
- Prevent child abuse and neglect.

A monthly interprofessional family review (IPFR) was developed to discuss families who are struggling with health or mental health concerns that complicate the home visitor’s ability to support the family. It provides the home visitor access to interprofessional practice resources that optimize health outcomes and provides faculty and graduate students an important learning experience in interprofessional collaborative practice. An advance practice nurse, a clinical psychologist, and graduate level health professions students offer consultation and staff development for home visitors in family goal planning and support strategies for vulnerable families. Other professionals are invited as needed depending on the needs of the families.

**Objectives:** Participants will be able to:
- Describe an innovative interprofessional practice model that supports community health workers in providing effective, evidence based services for the most vulnerable first time parents in the community and provides an important opportunity for graduate students to participate in interprofessional collaborative practice.
- Evaluate the community health workers experience of the IPFR process using factors associated with successful collaboration.
- Explore ways to enhance quality, access and reduce the cost of interprofessional practice through innovative interprofessional model development.
Methods: Presentation, interactive discussion and case examples will be used to describe the IPFR.

Results: Through the presentation, discussion and case examples, participants will understand the IPFR and evaluation, and be able to ask targeted questions about implementing it in their settings.

Implications: Participants will be able to ask targeted questions to plan strategies for implementation in their own settings.

Author Biographies
Emily Akerson, RN, FNP-BC, graduated with a BSN from Cornell University, an MN, from the University of Washington and is currently enrolled in a doctoral program at University of Virginia. She has over 20 years of experience as a nurse practitioner. She is an Associate Director of the Institute for Innovation in Health and Human Services (IIHHS) at James Madison University (JMU). Her responsibilities include facilitating interprofessional education and collaborative practice through the IIHHS.

Tim Schulte is a Clinical Professor of Graduate Psychology at James Madison University. He has his doctorate in Combined-Integrated School-Counseling- and Clinical Psychology and serves as Training Director of the Counseling and Psychological Services Clinic at JMU. He has worked in integrated Pediatric and Primary Care medical practices, and maintains an active private practice. His areas of teaching and research include clinical supervision, integrated behavioral health and primary care, and psychological assessment.

Promoting creative and playful therapeutic interventions and collaborations across the country and throughout the world is a regular activity for Anne Stewart. Anne is a Professor of Graduate Psychology at James Madison University in Virginia where she teaches and supervises graduate students in interprofessional ethics, play therapy, family therapy, and clinical practicum. She serves as the faculty coordinator for the Interprofessional-International concentration and has led student courses in the Dominican Republic and Costa Rica.

P3-12. The Role of Physical Therapy in an Innovative Interprofessional Diabetes Care Model
- Steven Snyder, Western University of Health Sciences, Pomona, CA, USA
- Bhavana Raja, Western University of Health Sciences, Pomona, CA, USA
- Janet Konecne, Western University of Health Sciences, Pomona, CA, USA

Submitted abstract:
Background: Diabetes is a multi-system disease associated with multiple complications which calls for a multi-systems approach; lending it to the unique opportunity for an interprofessional care team utilizing innovative care models. Current models require sequential follow-up visits to a variety of specialists, requiring significant time and energy from the patient for disease management. However, this new interprofessional model is cost-effective, resulting in seamless patient experiences and effective care.

Objectives: The purposes of this presentation are to describe the innovative model of interprofessional care currently practiced at Western Diabetes Institute at Western University of Health Sciences in Pomona, California, USA and to provide insight into the unique role of Physical Therapy in this model. Information regarding implications and challenges arising from team-based care and standardized outcome measurement tools will be discussed.
Methods: Detailed description of the unique role of physical therapy providing care within the interdisciplinary team and individual professional assessments documented in the Diabetes Cross-Disciplinary Index (DXDI) to create a matrix of the patient’s multi-system needs. This DXDI is used to develop effective care plans, integrating information from multiple professionals.

Results: Current results of this model reveal interprofessional care is effective and efficient for patients and healthcare professionals. The patients receiving care in this model present with greater independence, better quality of life and report satisfaction in a seamless one-stop comprehensive approach.

Implications: As an avant-garde in the interprofessional arena, Western University has been motivated to explore new avenues in their Patient Care Center with patient outcomes and safety at the helm. The use of interprofessional team working collaboratively in a new delivery model with financial intelligence for patients, providers and payers is the future. By presenting a new model, additional insight into interprofessional health care practice can be discussed and the potential for other care models may be explored.

P3-13. A practical framework to enhance collaborative practice: Interprofessional shared care planning through the use of a matrix planning tool and the integrative approach of ICF

- Andre Vyt, Artevelde University College & University of Ghent, Ghent, Belgium
- Nadia Brocatius, Artevelde University College, Ghent, Belgium
- Bianca Vandaele, Artevelde University College, Ghent, Belgium

Submitted abstract:

To counter a narrowed mindset based on professional boundaries, a planning tool can help, by making a differentiation between goals and actions, by identifying shared goals, and by following a stepwise reasoning starting with the personal factors and the context of the patient. Traditional goal setting and care planning is frequently hindered by a mindset of healthcare workers focused on professional identity and qualifications rather than on common goals for the patient or client system. This mindset also limits the quality of interprofessional collaboration and shared care. To counter this mindset, a planning tool can help, by making a clear differentiation between goals and actions and by clearly identifying shared goals, responsibility, task differentiation and collaboration. Also, therapists and health care workers can follow a stepwise reasoning starting with the personal factors and the context of the patient, identifying strengths and limitations, followed by seeking what we could achieve for and with the patient, and then proposing concrete actions in which different professions can collaborate. This method also avoids the pitfall of starting the clinical reason on the level of functions and then identifying implications on activity and participation level. This pitfall is frequently associated with a linear mode of causal thinking and narrowed vision on physical root factors. In the IP course at Artevelde University College, in which more than 600 students from more than 6 professional programs participate, this framework is used as a basis to “brainwash” students in a positive way so that they can avoid narrow-minded reasoning on the basis of professional identities and limit-setting.

Author Biographies

Andre Vyt is associate professor in human behavior and interprofessional care in Artevelde University College and University of Ghent (Belgium). He also is quality assurance officer in teacher education. After his studies in psychology and educational sciences he worked as researcher (UGhent), associated
scientist (NIH, USA), lecturer, and educational innovator. He is founding partner and managing director of the PROSE expertise network in quality management, and chair of the European Interprofessional Practice & Education Network (EIPEN).

Nadja Brocatus is lecturer in the departments of health care professions at Artevelde University College Ghent, and is a recognized expert for ICF in Flanders.

Bianca Vandaele is lecturer in the department of speech therapy and audiology at Artevelde University College Ghent, and a senior teamcoach in the interprofessional course.

**P3-14. Developing Interprofessional Competence in a Geriatrics Elective at the University of Washington**

- **Colleen Catalano**, University of Washington, School of Pharmacy, Seattle, WA, USA
- **Cara McDermott**, University of Washington, Pharmaceutical Outcomes Research and Policy Program, Seattle, WA, USA
- **Peggy Odegard**, University of Washington, School of Pharmacy, Seattle, WA, USA

**Submitted abstract:**

**Background:** The assessment of the medical, social, and functional well-being of the older adult often requires the expertise of an interprofessional healthcare team. Through the use of deliberate instructional design, an elective course focusing on challenges in caring for older adults encourages shared learning opportunities in an interprofessional setting. **Objectives.** Collaboratively develop a course between the Schools of Pharmacy and Nursing, designed to foster effective interprofessional education, including face-to-face interaction, group processing, shared decision making, online discussions, cooperative and collaborative learning.

**Methods:** Health care teams composed of Doctor of Pharmacy and Doctor of Nursing Practice students are organized as interprofessional working groups. Teams evaluate geriatric patient cases using both face-to-face and online discussions. Facilitators offer support by forming diverse student groups and providing case materials with instructor involvement. At the course conclusion, an online discussion board and a case discussion with an interprofessional panel of a physician, pharmacist, nurse practitioner, and social worker allows for dynamic interactive learning. Interprofessional collaboration is measured through an online questionnaire.

**Results:** Primary competencies developed include practicing patient-centered care, engaging interprofessional teams in the care process, collectively evaluating primary evidence, exploring evidence-based practice limitations in geriatrics, and use of new technology. 32 students (97%) completed the post-course online questionnaire. Most (90%) agreed/strongly agreed that the interprofessional panel helped refine their thinking; 84% agreed/strongly agreed the panel modeled how they may consult and collaborate while 94% felt the interprofessional activity contributed to their learning.

**Implications:** Development of a team-oriented, patient-centered activity in an elective course in geriatrics fosters understanding of the importance of interprofessional collaboration to enhance patient care in the older adult population. Future work includes expanding diversity of enrollment, expanding initial collaborations into clinical practice, and incorporating new learning technologies to enhance interprofessional collaboration.
P3.15. Tweeting Towards Enhanced Collaboration in Interprofessional Clinical Education

• Caitlin Fitzgerald, MGH Institute of Health Professions, Boston, MA, USA

Submitted abstract:
**Background:** The Interprofessional Dedicated Education Unit (IPDEU) experience is a clinical experience (CE) course emerging from partnership of an academic institution and a hospital to educate students for leadership in interprofessional patient care (IPC). Within the IPDEU course, students utilize Twitter, a growing social media platform, to facilitate reflection, learning, communication, and collaboration.

**Methods:** The IPDEU uses a patient-centric hands-on clinical learning model in which speech therapy, physical therapy, and nursing students working in interprofessional pairs on an inpatient unit to learn the value of IPC. Students reflect on their experiences via facilitated group debriefings, reflective writing and via a bi-monthly Twitter activity.

The IPDEU student orientation provides background on interprofessional education (IPE) and practice. Students are educated on the course Twitter activity and are provided information regarding professional use of Twitter and HIPPA compliance. Students “follow” specific Twitter accounts related to IPC and IPE. Pre and post course surveys investigate previous Twitter use and provide an opportunity for feedback on the activity.

**Results/Implications:** Through care delivery, dyads learn about team member roles and responsibilities, practice communicating, develop frameworks for values and ethics, and experience teamwork in an authentic setting. The Twitter activity allows students to engage with peers and faculty across units and disciplines as well as with the IPE and IPC community at large. The increased communication and exposure coupled with CE may better position student to become knowledgeable and quality IP collaborators to impact future healthcare. The pilot phase of this activity has lead to a more robust orientation process for the Twitter activity. Early observations suggest that utilizing Twitter in an IP CE course may enhance students’ knowledge of IPC and may provide a more dynamic reflective process.

P3.17. Improving interprofessional education and collaborative practice through evaluation: An exploration of current trends

• Emmanuelle Careau, Universite Laval, Center for Interdisciplinary Research in Rehabilitation and Social Integration, Quebec, QC, Canada

Submitted abstract:
**Background:** Since early in the 1990s, many strategies have been developed and implemented to improve ICP and IPE. However, authors still continue to advocate for more rigorous evaluation studies to better understand these phenomena and allow confident widespread implementation of practice—based ICP and IPE interventions. Given their complex nature, evaluation poses many challenges in this field: it often involves multiple heterogeneous interventions, nonlinear dynamic relationships between knowledge/skills acquisition and behavioural change, system—level variables such as trust, social capital and team cohesion as well as many interdependencies between the actors and organizations involved. Methods for evaluating complex interventions are just starting to emerge and hence are not well known nor widely used in the field yet. Although, a number of concerns was reported in IPECP program evaluation, such as limited descriptions of project objectives and inconsistency in outcomes measurement, bias induced by the evaluation process, and evaluation methods not detailed enough nor theoretically founded.
Objectives: To describe how evaluation is currently conducted in the IPECP field including the focus and purpose chosen as well as approaches, design and methods used. To determine the state of the research on evaluation and assessment within the field.

Methods: A retrospective analysis of oral and poster presentation's abstracts from the most recent international IPECP conferences (All Together Better Health (ATBH) VI, Kobe, Japan, 2012; Collaborating Across Borders (CAB) IV, Vancouver, Canada, 2013) was conducted to examine current trends. An exploration of peer—reviewed and grey literature was then conducted to determine the state of research on evaluation within the IPECP field.

Results: Despite the proliferation of measurement tools, the analysis revealed that evaluation capability within the field is still limited. Program evaluation is mostly conducted with little reference to theories or frameworks and a predominant focus on short—term outcomes (learner satisfaction, knowledge and skills).

Implications: Suggestions are offered for increasing the evaluation capability within the IPECP field to better support effective practices in an increasingly complex health care system.

Author Biographies
Dr Emmanuelle Careau is assistant professor in the rehabilitation department at the Faculty of Medicine of Université Laval (Québec City, Canada) and affiliate assistant professor at the College of Health Disciplines at University of British Columbia. Dr. Careau did her graduate studies and postdoctoral training on the conceptualisation and evaluation of interprofessional education and practice. She has been leading the scientific development at the Réseau de collaboration sur les pratiques interprofessionnelles en santé (RCPI).

Dr. Lesley Bainbridge is the Director of Interprofessional Education in the Faculty of Medicine and Associate Principal, College of Health Disciplines at the University of British Columbia since 2005. Dr. Bainbridge has been, and is currently, principal or co—investigator on several Teaching and Learning Enhancement Fund grants, two major Health Canada grants focusing on interprofessional education and collaborative practice, and several research grants related to IPE.

Dr. Chris Lovato is a Professor in the School of Population and Public Health and Director of the Evaluation Studies Unit, Faculty of Medicine at the University of British Colombia. Her research interests focus on evaluation studies in public health, health services, and medical education contexts. She has developed a strong belief that to address the complex health issues of today requires as much of a focus on generalization and external validity, as internal validity.

P3-18. Core Innovation: Infusing IPE through your curriculum

- Richard Rafes, Utica College, Utica, NY, USA
- Shauna Malta, Utica College, Utica, NY, USA
- Annemarie Kinsella, Utica College, Utica, NY, USA
- Cynthia Love-Williams, Utica College, Utica, NY, USA

Submitted abstract:
Infusing interprofessional education (IPE) through a curriculum can be a challenging task for academic institutions. The design and delivery of curricula to produce a “collaboration ready” healthcare
workforce often focus on placement of interprofessional learning activities once students have formed their professional identities and is typically abbreviated in time and scope of experience. In addition, scheduling challenges across departments and limited resources can lead to multiple attempts to adopt IPE that are not successful, not sustainable or become fragmented despite a strong interest among faculty and students.

The presenters suggest an innovative model that takes a more radical approach in constructing an integrated and comprehensive experience for students, centered around a common core element. This model originated as faculty members within the School of Health Professions and Education began conversations with the dean, who shared a different perspective and vision for IPE.

The process originated with curriculum mapping to review student learning objectives. Mapping is a process already established as an accreditation activity for many academic institutions and produced results that guided the development of the IPE curriculum. Common content themes emerged through this process, providing the identification of core elements. Core elements were then reviewed and decisions were made to embed a central theme that would promote patient centered care. Specific activities for student learning were then developed to accomplish IPE objectives. The result of this iterative process provided opportunities for curricular redesign as well as establishment of new programs promoting interplay among existing programs. Analysis allowed identification of shared resources that could potentially support the financial viability of new programs that may have otherwise been denied.

This unique organizational approach may prove beneficial to institutions interested in planning and implementing IPE curricula that are sustainable.

**Objectives**  This presentation will provide participants with the ability to:

1. Identify important steps in the process of curriculum review and redesign for IPE consideration
2. Select interdisciplinary common core elements to construct a patient centered IPE
3. Provide an organizational perspective on centralized placement of IPE in curricula
4. Link seemingly autonomous programs into a common educational thread
5. Describe the process and feasibility of replication at other academic institutions
6. Provide a framework for determining future academic program offerings
7. Design an integrated curricular plan that incorporates IPE leading to desirable student outcomes

**Author Biographies**

Richard Rafes serves as interim dean for the School of Health Professions & Education at Utica College. Previously, he was president of East Central University, president of West Virginia School of Osteopathic Medicine and senior Vice President for Administration at University of North Texas. He holds a Ph.D. in higher education administration from University of North Texas and JD from University of Houston.

Shauna Malta is associate professor at Utica College and has been chairperson for the Department of Physical Therapy since January 2009. She previously served as the director of clinical education for the entry level doctoral program. Dr. Malta earned a clinical doctoral degree (DPT) from Utica College, a master’s degree in adult education from Elmira College and a baccalaureate degree in physical therapy from Russell Sage College.
P3-19. Improving Primary Care for Vulnerable Populations: Innovations in Training NP Students and Medicine Residents in Team-Based Care

- Christina Kim, University of California San Francisco / San Francisco VA, San Francisco, CA, USA

Submitted abstract:

**Background:** US professional organizations and current primary healthcare systems increasingly endorse patient-centered medical homes (PCMH) to improve equality, access, and population health. Homeless and vulnerable populations may be particularly well served by PCMH which include a team-based approach to care. In 2011 the San Francisco VA was awarded a Center of Excellence for Primary Care Education. A community-based outpatient clinic targeting homeless and vulnerable veterans became a training site for nurse practitioner (NP) trainees and internal medicine residents to participate in an interprofessional team-based curriculum.

**Objectives:** (1) Describe our innovative, inter-professional team-based curriculum, which includes both didactic and experiential learning. (2) Discuss ways in which this curriculum may influence trainee perceptions toward vulnerable populations and prepare a collaborative-ready workforce. (3) Discuss implications for future NP training policy initiatives and research.

**Methods:** Curriculum includes interactive seminars where trainees learn interprofessional communication skills and apply them to clinical scenarios. Skills are reinforced in trainees’ interprofessional team-based workplace. Experiential learning includes coached huddles, group clinic visits, shared visits and a quality improvement project.

**Results:** End-of-year interviews demonstrate that trainees value an interprofessional, team-based approach to care, particularly for homeless and vulnerable populations. Improved communication and clear roles for interdisciplinary team members outside of medicine (e.g., mental health, social work, administration, and pharmacy) were emphasized. Trainee evaluations of a weekly interprofessional conference showed high value in discussing patient care plans as an interdisciplinary group (5.3 on a scale of 1 to 6, n=12).

**Implications:** A successful interprofessional team-based curriculum generates positive trainee perceptions of careers in primary care for vulnerable populations. The location of training in community-based settings as well as a team-based approach should be considered when determining policy regarding primary care training.

**Author Biographies**

Christina Kim is a nurse practitioner and clinical faculty at UCSF. She works at a VA Homeless Center and at the San Francisco Department of Public Health. Her research and programming interests are in public health and improving access to care for vulnerable populations. She is part of the faculty team that leads the VA’s Center of Excellence in Primary Care, a 5-year initiative focused on interprofessional educational and training redesign for primary care.

Bridget O’Brien is the director of evaluation for the SFVA Center of Excellence for Primary Care Education and a faculty member in the UCSF Division of General Internal Medicine and the Office of Research and Development in Medical Education. Her research focuses on workplace learning and interprofessional communication.
Shalini Patel, MD is an Assistant Clinical Professor of Medicine at UCSF who works in primary care at the San Francisco VA (SFVA) Medical Center. She has an interest in primary care education, underserved medicine and interprofessional education. She serves as the SFVA community based clinics site director for their Center of Excellence in Primary Care Education, which emphasizes interprofessional primary care training. She is also the San Bruno VA community clinic medical director.

Rebecca Shunk is the Co-director of the Center of Excellence in Primary Care Education at the San Francisco VA Medical Center and an Associate Professor at the University of California San Francisco. She and her team innovate to develop strategies to improve interprofessional, team-based health professions education in patient-centered primary care. In this model Nurse Practitioner students and Internal Medicine residents along with other interprofessional trainees partner with clinic staff to provide team-based care.

P3:20. Teaching Professional Competencies through Interdisciplinary Community Case Building

- **Colleen McMillan**, University of Waterloo, School of Social Work, Renison College, Waterloo, ON, Canada
- **Alice Schmidt-Hanbidge**, University of Waterloo, School of Social Work, Renison College, Waterloo, ON, Canada

Submitted abstract:

**Background/Objectives:** Transformation of healthcare requires a paradigm shift that fosters interprofessional collaborative practice (ICP). Interprofessional education (IPE) is recognized worldwide as an approach to improving student training emphasizing patient-centered care. According to the 2010 WHO report on IPE/ICP, HIV/AIDS is a priority area for interprofessional training. The objectives of this interprofessional HIV/AIDS community-academia collaboration is to (1) train students from health and social care professions to work collaboratively on community-identified needs; (2) improve the quality of care at an individual and population level; (3) engage the HIV/AIDS community to ensure the voice of the community and patients is heard and addressed.

**Methods:** An IP course in HIV was developed in 2008 with an APTR grant. The course provided the structure to garner faculty support and student recruitment. It has evolved to incorporate the 2011 IPEC core competencies. With support of the County immunosuppression clinic and several CBOs, the “HIV/AIDS Interprofessional Community-Academia Collaboration” was formed. The focal point of this program is a mentored community service learning (CSL) project that meets the collaboration’s objectives. Project focuses are identified by CBOs. Systematically-conducted needs assessments and accountability to CBOs ensure projects target concerns/barriers identified.

**Results:** Four IP student cohorts have completed with one currently in the program. Three CSL projects have been completed successfully as measured by their incorporation into the existing education/outreach CBO programs. Students’ reflections support enhanced appreciation of other professions, respect for patients and CBOs, and IP teamwork/communication.

**Implications:** A community-academia collaboration formed to address the needs of the HIV/AIDS community can be a successful model in impacting the community while developing students’ attitudes and skills needed to promote IPE/ICP. The success of this collaboration recently earned support at the county level. Future CSL projects will continue to focus on HIV/AIDS topics of high priority.
Author Biographies
Veronica Young, PharmD, MPH is Clinical Associate Professor and Director of Interprofessional Practice in the Pharmacotherapy Division at The University of Texas at Austin College of Pharmacy. Dr. Young’s practice focuses on public health and community engagement with an emphasis on improving the quality and safety of care in the community using an interprofessional approach. She collaborates with organizations and community partners at the local, regional, and national level.

Delia Bullock, MD is an Assistant Professor of Medicine at the University of Texas Health Science Center at San Antonio, and the Medical Director of the University Health System FFACTS (Immunosuppression) Clinic. She is engaged in numerous HIV/AIDS community initiatives. As the Medical Course Director of an interprofessional HIV elective, she serves as the content expert and community mentor for student service learning projects, improving the quality of care in HIV/AIDS patients.

John Herbold DVM, MPH, PhD is a Diplomate of the American College of Veterinary Preventive Medicine, American College of Animal Welfare, and Fellow of the American College of Epidemiology. Dr. Herbold’s community and public health practice activities span local, national, and international assignments. As a faculty member at the University of Texas School of Public Health, Dr. Herbold focuses on teaching and technical assistance for disaster preparedness, emerging infectious diseases, and environmental health.


- Veronica Young, The University of Texas at Austin, College of Pharmacy, San Antonio, TX, USA
- Delia Bullock, University Health System, San Antonio, TX, USA
- John Herbold, University of Texas Houston, School of Public Health, San Antonio, TX, USA

Submitted abstract:
Background/Objectives: Transformation of healthcare requires a paradigm shift that fosters interprofessional collaborative practice (ICP). Interprofessional education (IPE) is recognized worldwide as an approach to improving student training emphasizing patient-centered care. According to the 2010 WHO report on IPE/ICP, HIV/AIDS is a priority area for interprofessional training. The objectives of this interprofessional HIV/AIDS community-academia collaboration is to (1) train students from health and social care professions to work collaboratively on community-identified needs; (2) improve the quality of care at an individual and population level; (3) engage the HIV/AIDS community to ensure the voice of the community and patients is heard and addressed.

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**P3-22. Using the WHO Patient Safety Curriculum for Interprofessional Education of Health Professions Students**

- **Pat Callard**, Western University of Health Sciences, Pomona, CA, USA

**Submitted abstract:**
The World Health Organization (WHO) Patient Safety Curriculum for health professional provides the framework for interprofessional education. Students from nine health profession programs work together online in small groups to discuss actual or potential patient errors. Through a wiki format and a face-to-face session, students learn how to approach patient safety and quality through a systems approach. Students are encouraged to share how a systems approach can be used to promote safety in each of their professions.

**P3-23. Arts-Based Research Dissemination: Innovation in Interprofessional Health Education**

- **Sheri Price**, Dalhousie University, Halifax, NS, Canada
- **S. Meaghan Sim**, Dalhousie University, Halifax, NS, Canada
- **Sara FL Kirk**, Dalhousie University, Halifax, NS, Canada
- **Megan Aston**, Dalhousie University, Halifax, NS, Canada
Submitted abstract:
This workshop aims to share our experience using an arts-based approach to research dissemination within an interprofessional health education (IPHE) forum. Within this workshop we will describe our use of dramatic theatre to convey research findings and create an opportunity for health professional students to collaborate in ‘re-writing the script’ for obesity management practice. The use of arts within this IPHE event shares our research findings specific to the experience of obesity management from the perspectives of persons living with obesity, health providers, and policymakers.(1) Through the use of dramatic theatre, we create an opportunity for health professional students to explore biases and stigma in association with obesity and also consider how health professionals can work collaboratively to manage this complex and controversial issue. Our research revealed that weight bias, stigma and blame are pervasive within the health care system and obesity management practices.(1) Judgments and biases about weight not only come from the broader public, but stigmatization also exists within the health professional community from which clients and patients seek support.(2) Because the experience of being overweight takes place in the social world and in relationship with others, interpersonal relationships between health care providers and clients are therefore integral to the successful management of obesity.(3)

This combined knowledge dissemination and interactive IPHE initiative provides health professional students an opportunity to explore and address tensions in current obesity management practices and propose strategies to improve interprofessional collaboration in addressing other complex and chronic health conditions. The dramatic script and spoken words are derived directly from the participant interviews. The actors’ internal dialogue (directed at the audience) and external dialogue (directed at each other) highlight the spoken and unspoken tensions identified in the original research. The event allows students to ‘rewrite a script’ that not only addresses obesity bias and stigma but also one that promotes personal reflection and interprofessional practice. The specific objectives of our initiative workshop are for health professional students to work collaboratively to: (a) Critically analyze health professionals’ interactions and practices in dealing with complex health conditions such as obesity; (b) Identify and address biases, stigma and challenges within current obesity management practices, and (c) Envision strategies to enhance patient care management, interpersonal relationships (patient-practitioner) and interprofessional collaboration.

During this conference workshop we will describe our process in developing our findings into a script and dramatic play and will illustrate how we used this arts-based dissemination to promote interprofessional health education and collaboration. Within the workshop we will recreate the IPHE event – sharing a video portraying the live, dramatic performance and will invite participants to run through the associated learning activities. We will also share evaluation results of this CIHR-funded IPHE event titled Behind the Scenes: Interprofessional Insight on Obesity Management that has taken place in 4 locations across Atlantic Canada.

References
Author Biographies
Dr. Sheri Price is an Assistant Professor at the School of Nursing, Dalhousie University and an Affiliate Scientist at the IWK Health Centre. She is the co-PI of the Behind the Scenes dissemination grant. Her program of research is focused in the areas of health services, professional socialization, nursing work environments and women's health. Dr. Price currently serves as co-investigator on several nationally-funded research studies and she has published and presented her work both nationally and internationally.

Meaghan Sim is a PhD candidate (Interdisciplinary) at Dalhousie University and is the research coordinator for the Behind the Scenes dissemination grant. A professional dietitian, Ms. Sim’s research interests include maternal/child health and community health, using a social determinants of health lens and qualitative approaches.

Dr. Sara Kirk is the Canada Research Chair in Health Services Research with the School of Health and Human Performance at Dalhousie University with cross-appointments with Community Health and Epidemiology and the IWK Health Centre. Dr. Kirk is the co-PI of the Behind the Scenes dissemination grant. Through her research group, Applied Research Collaborations for Health, she leads research that uses a social-ecological approach to understand lifestyle factors influencing health status and health services utilization, particularly in relation to excessive weight gain (obesity).

Dr. Megan Aston is an Associate Professor at the School of Nursing, Dalhousie University and an Affiliate Scientist at the IWK Health Centre. She is a co-I of the Behind the Scenes dissemination grant. She uses feminist poststructuralism to guide her teaching and research which includes personal, social, and institutional constructions of the practices of nurses and clients. Specialty areas include public health nursing, maternal child/infant health, and early home visiting.

P3-24. Student experiences in Laos study tour: an evaluation of the interprofessional education program

- **Tomoko Koike**, Keio University, Faculty of Nursing and Medical Care, Tokyo, Japan
- **Rika Fujiya**, Keio University, Faculty of Nursing and Medical Care, Tokyo, Japan
- **Keiko Kishimoto**, Keio University, Faculty of Pharmacy, Tokyo, Japan
- **Shinzo Kato**, Keio University, Faculty of Nursing and Medical Care, Tokyo, Japan

Submitted abstract:
**Background:** Keio University has been implementing the study tour in Laos, as the program of Interprofessional Education. In 2013, field work in the rural areas have been added to the program in order to increase occasions for the participants to collaborate.

**Objectives:** We have assessed the changes found in the participants with the objectives to evaluate the effectiveness of the IPE with the new program.

**Methods**
- Participants: 15 of four medical, six nursing, and five pharmaceutical students.
- Program details: Comprised of four steps. Step 1 “Prepare”: collection of information about Laos. Step 2 “Think”: examined the needs and assets of Laotian healthcare and planned health education at the elementary school. Step 3 “Experience (for 11 days)”: implementation of the
study tour in Laos. They visited JICA, UNICEF, WHO, and healthcare facilities. They stayed overnight in the village’s family, carried out the field work and practiced the health education at the elementary school. Step 4 “Sharing”: present their results and share each of their experiences.

- Analysis: We examined the effects of IPE by observing the activities of the participants and analyzing the details of activity reports and other documents.

**Results:** We found the participants sharing the activity objectives and collaborating each other all through the process, making the most of the expertise unique to each faculty. They complimented each other, which facilitated the promotion of the students’ learning of relevant knowledge and skills, and they appreciated the program as it enabled them to implement more effective health care activities. As they followed the steps, we found, they became more interested to engage in the communication and the activities to fulfill their roles and responsibilities.

**Implications:** Giving more occasions of collaboration to the participants revitalized the participants’ team activities, leading to the enhancement of the IPE effect.

**P3-25. Ethics, Professionalism & Critical Thinking in Interdisciplinary Education**

- **Carole-Rae Reed,** Richard Stockton College of New Jersey, Galloway, NJ, USA

**Submitted abstract:**
This poster describes the conversion of an existing nursing course into an interdisciplinary course for health science majors. This course explores the concepts and principles of critical thinking, professionalism and ethical behavior. It is a freshman or first semester transfer level course for those health science majors, including students in pre-physical therapy, communication disorders, nursing, psychology, and general health science programs. The course promotes critical thinking and professional collaboration. It involves group projects, discussion, exploration of characteristics of professions and bioethical theories, issues, and case studies in a seminar format. The Critical Thinking test was given during the first and last weeks of class. The same test was given to all nursing sections of the course which focused specifically on the profession of nursing and nursing ethics. The mean change scores between pre- and post-test will be compared to determine if there is an advantage to interdisciplinary education in developing critical thinking. Results will be available for the poster.

**P3-26. Evaluation of Collaboration Readiness for IPE**

- **Karen Saewart,** Arizona State University, Phoenix, AZ, USA
- **Gerri Lamb,** Arizona State University, Phoenix, AZ, USA

**Submitted abstract:**
Demonstration of the value of interprofessional education is a global priority and an extremely challenging goal. Current measures of teamwork and interprofessional learning, while plentiful, do not fully capture recent advances in IPE competency development. Literature and anecdotal reports suggest many of the most popular tools are not sensitive to change in student perception or performance over time. The purpose of this presentation is to describe the development of a competency-based evaluation program for an interprofessional primary care curriculum.

We are using a mixed methods approach for IPE evaluation blending the use of standardized and new measurement tools as well as interviews and focus groups with students, faculty, and clinical preceptors.
Surveys of collaboration readiness are conducted at student entry into the project and at regular intervals throughout. Interviews also are conducted at baseline and during interprofessional clinical experiences.

Initial surveys of a small number of faculty and students indicate differing perceptions of collaboration readiness across the 4 IPEC domains. In interviews, students identify learning gaps consistent with the literature and the IPEC competency statements. Tracking logs of student IPE experiences in clinical practice show gradual increases in exposure to teamwork and interprofessional activities. Creating meaningful programs of IPE evaluation requires multi-faceted strategies. The dearth of tools sensitive to today’s goals for collaboration readiness is a significant challenge. Our experience suggests that a combination of standardized and new measures with qualitative strategies may provide an effective first step needed for programs of research to demonstrate IPE’s value.

Author Biographies
Karen J. Saewert, PhD, RN, CPHQ, CNE, ANEF is a co-investigator on a 3-year grant funded by the Josiah Macy Jr. Foundation to develop and evaluate an interprofessional primary care curriculum. Her work focuses on: assessment and evaluation in support of teaching and learning excellence; design, delivery, and evaluation of curricular innovations; and, interprofessional education emphasizing teamwork, quality and safety, and patient-centered care. She currently teaches academic and practice based program production and evaluation.

Gerri Lamb, PhD, RN, FAAN is the principal investigator on a 3-year grant funded by the Josiah Macy Jr. Foundation to develop and evaluate an interprofessional primary care curriculum. She currently teaches in interprofessional masters programs in health systems and health care architecture and mentors students in her college’s interprofessional doctoral program.

P3-27. The Scottish Health and Social Care Team Challenge
- Jenny Miller, NHS Education for Scotland, Dundee, Scotland, UK
- Sharron Blumenthal, Glasgow Caledonian University, Glasgow, Scotland, UK
- Lesley Diack, Robert Gordon University, Aberdeen, Scotland, UK
- Veronica O’Carroll, St. Andrews University, St Andrews, Scotland, UK

Submitted abstract:
Background: The need for health and social care to work collaboratively together across professions, sectors and specialties has become even more of a necessity as economic and demographic issues, increasing complexity of health care and a shift in workforce skill mix stretches the traditional delivery of services (Scottish Government,2011, 2013,2013b; World Health Organisation, 2013).

Objectives: Introduction of a ‘team challenge’ for undergraduate health and social care students in order to promote interprofessional learning and working.

Methods: A Scottish project team from Scottish Universities and NHS Education for Scotland obtained funding to work collaboratively with HealthFusion team, Australia to develop a Scottish Health and Social Care Team Challenge. This will be run in March 2014 based on the tried and tested HealthFusion methodology that promotes ‘true to practice’ interprofessional educational opportunities for teams of undergraduate health and social care students. Teams of 4-8 students are issued with a complex case scenario that has been developed by a working group including service users and carers. The teams
formulate a comprehensive person centred care management plan and will present their plan to an expert panel of judges. Evaluation of this interprofessional educational experience is being undertaken.

**Results:** Ethical approval to gather evaluative data has been granted and the result of the Scottish experience will be described via student, mentor, service user and project team stories. The results will also share lessons learnt for those considering translating international initiatives locally.

**Implications:** It is anticipated that the Scottish HSCTC will aid students in developing core skills such as leadership, communication and person centred skills and will enable them to recognise the importance of team working, particularly in ensuring positive service user outcomes. If successful this collaborative approach to learning and development will be used with teams of health and social care practitioners within the workplace.

**P3:28. Using a Family’s Account of an Adverse Drug Event During Hospitalization to Teach Shared Decision-Making and Patient-Centered Care**

- **Skye McKennon,** University of Washington, School of Pharmacy, Seattle, WA, USA
- **Leigh Ann Mike,** University of Washington, School of Pharmacy, Seattle, WA, USA

**Submitted abstract:**

**Background:** Health sciences students at the University of Washington participated in a powerful interprofessional learning experience in shared decision-making and patient-centered care first hand from a moving family story.

**Objectives:** An interprofessional group of students were engaged in a medication safety course using technology and in-person means to learn the value of patient-centered care, shared-decision making, and collaborative practice. The objectives of the learning experience were to describe shared-decision making, interprofessional education, and collaborative practice within the context of a patient story.

**Methods:** Prior to the live session, students watched a web-based didactic which included an interview with the patient’s family and an introduction to the concepts of collaborative practice and shared decision-making. Students then met as a large group for the family members to recount their experiences within the health care system. The session concluded with students having the opportunity to ask the family members personal questions. Students were surveyed regarding their reaction to the experience.

**Results:** There were 95 University of Washington Health Sciences students that participated in the event. Students indicated the three most learning important learning points from the experience were: importance of shared-decision making (94% of respondents), importance of teamwork (57%), and importance of team members “speaking up” (57%). Students indicated that if they could change something in the patient scenario it would be to include patients and their agents on their team and work with them to meet goals.

**Implications:** After this session, learners will be able to: 1.) Describe a patient-centered approach to learning the importance of shared-decision making 2.) Utilize provided resources to create their own interprofessional education session on shared-decision making and collaborative practice.
Author Biographies
Skye McKennon, PharmD, BCPS Dr. McKennon is a clinical assistant professor at the University of Washington School of Pharmacy. In addition to her teaching, she practices as a pharmacist at the Evergreen Hospital and Medical Center's interdisciplinary Lipid Management Clinic. Interprofessional education and health promotion and disease prevention are her research interests.

Leigh Ann Mike, PharmD, BCPS, CGP Dr. Mike is a clinical assistant professor at the University of Washington School of Pharmacy. She is heavily involved in the design and teaching of the School’s curriculum and is currently practicing as a consultant pharmacist with UW Pharmacy Cares, which provides services to group of local retirement communities. Her previous experience includes seven years as a clinical pharmacist in the medical intensive care unit at Harborview Medical Center. Her professional interests are geriatrics, critical care therapeutics, medication safety, and education.

P3:29. Preparing Students to Participate in Family Meetings: An Interprofessional Approach in Traumatic Brain Injury

- Sylvia Langlois, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada
- Elizabeth Hanna, Bridgepoint Health, Toronto, ON, Canada
- Rivie Seaberg, Rivie Seaburg Consulting, Toronto, ON, Canada

Submitted abstract:
Background: Traumatic brain injuries (TBI) affect more than 1.9 million Americans every year and are a leading cause of life-long disability. Injured individuals experience alterations in cognition, emotions, language and/or productivity; however, family members experience significant change in roles, responsibilities, relationships and financial impact. Thus, families require additional support and encouragement to be involved in the care of the individual, best promoted through teamwork. Such coordinated intervention is enhanced through family meetings; however, healthcare students typically do not have the opportunity to practice this important component. This presentation will describe an innovative interprofessional educational simulation to prepare students to conduct a family meeting.

Objectives: Participants will:
- Review an example of a learning activity that enhances skill in conducting a family meeting
- Consider benefit of simulated learning
- Consider application of similar teaching methods

Methodology: As part of its requisite IPE program, this university developed an elective blended learning activity involving a combination of individual on-line learning, facilitated interprofessional asynchronous on-line discussions, and face-to-face simulation. Interprofessional teams of students learn about TBI and its effects on the individual and family highlighted in the module, as well as key components of conducting family meetings in an on-line format. These teams then meet face-to-face to prepare for and conduct the family meeting with simulated family members.

Results: Themes from an analysis of student and facilitator focus groups evaluations and feedback provided will be presented.

Implications: Conducting of family meetings is a critical element of student learning and is ideally learned in a simulated interprofessional setting.
Author Biographies
Sylvia Langlois is the Faculty Lead for Curriculum, Centre for Interprofessional Education, and an Assistant Professor in Occupational Science and Occupational Therapy, University of Toronto. She has been involved in the development, assessment and implementation of the requisite, competency-based IPE curriculum at the University of Toronto since 1996. She chairs various committees, including the InterFaculty Curriculum Committee, and has lead working groups charged with the development and assessment of many core and elective learning activities.

Elizabeth Hanna is the Interprofessional Education Specialist at Bridgepoint Health and is a Speech-Language Pathologist. She has extensive experience in developing innovative educational opportunities. She has contributed to the development of IPE learning activities at the University of Toronto as is a frequent facilitator.

P3.30. Blended Interprofessional Learning: The marriage of face-to-face and online learning activities.

- Dean Lising, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada
- Sylvia Langlois, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada

Submitted abstract:
**Background:** Online learning continues to grow in educational circles and has been a practical solution to accessibility and scheduling challenges common to connecting Interprofessional Education (IPE) learners. With the expansion of online IPE electives, there is a growing evolution within the University of Toronto IPE curriculum to combine face-to-face small group sessions with asynchronous discussion forums to enhance longitudinal learning and community among professional students from different faculties. Garrison, D. R., & Kanuka, H. (2004) recognize the potential to support deep and meaningful learning through blending of both face-to-face and online learning. Advantages of blended learning include flexibility, pedagogic richness, cost effective and positive effects on student performance.

**Objectives:**
- Define different delivery modalities of online and face-to-face small group learning tools that could be used with interprofessional education and practice.
- Understand the benefits and challenges of using blended IPE learning activities.
- Anticipate blending learning operational considerations and learner-centred practices for planning and adapting curriculum.
- Consider the application of future educational technology to innovate future blended learning with interprofessional education and practice.

**Methods:** Presenters will highlight literature and best practices regarding blended learning methods. As well, they will discuss examples of how they have transformed existing online learning activities to blended formats to enable the development of interprofessional competencies, using sound pedagogical underpinnings.

**Results:** Participants will have an understanding of blended learning strategies and opportunities. As well, they will be exposed to examples of strategies to redesign of curriculum from an online to blended
format. Student and faculty evaluations of revisions will supplement the discussion. Participants will be able to consider how blending learning can facilitate learning outcomes.

**Implications:** With a move to the greater use of various technologies, faculty will be able to consider how blended learning strategies can facilitate interprofessional learning.

**References:**

**Author Biographies**
Dean Lising is the Curriculum Associate, Centre for Interprofessional Education and coordinates online, face-to-face and blended IPE electives at University of Toronto. He facilitates online forums as Faculty for the Physiotherapy Practice and the Canadian Health Care System Course, Department of Physical Therapy, University of Toronto. He is Manager, Academic Affairs, Health Disciplines, St. Michael’s Hospital and has past professional practice, education leadership experience. He is a Physiotherapist and is completing his MHSc (Health Administration).

Sylvia Langlois is the Faculty Lead for Curriculum, Centre for Interprofessional Education, and an Assistant Professor in Occupational Science and Occupational Therapy, University of Toronto. She has been involved in the development, assessment and implementation of the requisite, competency-based IPE curriculum at the University of Toronto since 1996. She chairs the InterFaculty Curriculum Committee and various working groups charged with the development and assessment of many core and elective learning activities.

**P3:31. Exploring Student-Reported Factors that Influence Collaboration During a Longitudinal Interprofessional Student-Run Clinic Involving First Year Pharmacy and Medical Students**

- **Melissa Rotz**, Philadelphia College of Pharmacy of University of the Sciences, Philadelphia, PA, USA
- **Gladys Dueñas**, Philadelphia College of Pharmacy of University of the Sciences, Philadelphia, PA, USA
- **Anisha Grover**, Philadelphia College of Pharmacy of University of the Sciences, Philadelphia, PA, USA

**Submitted abstract:**
**Background:** The interprofessional education (IPE) core competencies were developed to serve as a framework for health profession schools to develop IPE curricular programs with the goal of preparing “collaborative ready” professionals. There is limited research regarding what factors may facilitate or inhibit collaboration among students from a student perspective.

**Objective:** To explore student-reported factors that influence collaboration within IPE.

**Methods:** Twenty-five first-year pharmacy (P1) students at University of the Sciences and 50 first-year medical (M1) students at Cooper Medical School of Rowan University enrolled in a 24-week IPE experiential course were invited to participate in focus groups. In March 2013, 3 focus groups were conducted and additional focus groups will be conducted in 2014. A literature search was used to derive
topic guide questions, which were pilot-tested and revised. Focus group responses were audio-recorded, transcribed verbatim, and applied to a qualitative thematic analysis. An exit survey collected student characteristics.

**Results:** For the preliminary analysis, 18 students participated in 3 focus groups (1 P1 group, 1 M1 group, and 1 mixed group: 6 students in each). Compared to M1s, the P1s were younger (22 vs. 26 years), had fewer college degrees, and had less health care experience. Student-reported factors facilitating collaboration included: showing mutual respect, using technology for communication, exhibiting teamwork and problem-solving skills, adapting to changing environments, and sharing patient-centered goals. Factors inhibiting collaboration included: perceptions of provider roles, inconsistent expectations of program goals (between students and preceptors), organization of course (campus/site locations, student schedules), and learning environment (clinical workflow, limited space and resources).

**Implications:** Emergent themes that students reported revealed various factors that can facilitate and inhibit student collaboration. These findings can inform curricular redesign focused on: clarifying provider roles, requiring ongoing preceptor development, enhancing student orientation, and coordinating student schedules to better prepare “collaborative ready” students.

**Author Biographies**
Dr. Melissa E. Rotz, PharmD is PGY2 Pharmacotherapy Resident and Instructor of Clinical Pharmacy at the University of the Sciences in Philadelphia, PA. She has served as a pharmacy preceptor within the IPE student-run clinic, and she helped to develop the pharmacy learning activities within the IPE orientation program.

Dr. Gladys G. Dueñas, PharmD, BCACP is Assistant Professor of Clinical Pharmacy at the University of the Sciences in Philadelphia, PA, and Adjunct Faculty at Cooper Medical School of Rowan University. She is coordinator of Interprofessional Education Experiences. She designed the IPE longitudinal student-run clinic experience and continues to teach within this program.

Dr. Anisha B. Grover, PharmD is Assistant Professor of Clinical Pharmacy at the University of the Sciences in Philadelphia, PA, and Adjunct Faculty at Cooper Medical School of Rowan University in Camden, NJ. She teaches within the IPE longitudinal student-run clinic experience, helped to develop the pharmacy learning activities within the IPE orientation program, and designed the satellite IPE community pharmacy learning experience.

**P3-32. Top Chef – Dysphagia…an IPE experience**
- Lisa Sokoloff, Baycrest, Toronto, ON, Canada
- Khashayar Amirhosseini, Baycrest, Toronto, ON, Canada
- James Smith, Toronto, ON, Canada
- Deb Bonfield, George Brown College, Toronto, ON, Canada

**Submitted abstract:**
**Background:** Swallowing disorders and nutritional issues are common in the elderly who have a neurological injury, disorder or disease. Even normal aging changes can result in persons requiring texture modifications in order to eat/drink safely. Culinary training programs do not focus on this and graduating students don’t necessarily have an appreciation of why foods/liquids may need to be
modified while still allowing people to enjoy their meals. Speech-Language Pathologists and Registered Dietitians often recommend modified food/liquid textures without appreciating how those foods can be presented in an appetizing way. The balance between clinical needs and food preferences is extremely important in enhancing quality of life in the elderly.

This collaboration between Baycrest (University-affiliated teaching hospital) and George Brown College incorporated IPE techniques to enhance clinical knowledge, inform practice and foster scholarship to optimise best practice in geriatric care. Innovative and varied educational strategies were used to teach Culinary Management Nutrition students about swallowing and nutritional issues and to teach clinicians about food preparation/presentation to enhance quality of life.

**Objectives:**

1. To educate Culinary Management Nutrition students about swallowing, swallowing disorders and nutritional issues to improve their knowledge and attitudes about persons with swallowing disorders and the professions involved (quantitative)
2. To use varied IPE learning strategies to enhance learning of both the students and the clinicians (qualitative)
3. To effect curriculum change

**Methods:** The project had 4 phases:

1. Didactic/interactive learning about swallowing and nutritional disorders
2. Observation of clinical swallowing assessments
3. Small group case study and development of modified texture/nutrition meal plan
4. “Top Chef Cook-off” competition by the groups

**Results:** Both qualitative and quantitative evaluations were positive. In particular, knowledge of professional roles increased.

**Implications:** This initiative has already contributed to curriculum development at George Brown College and will expand to include other student groups.

**Author Biographies**

Khashayar Amirhosseini is a Registered Dietitian with the College of Dietitians of Ontario. He has an MBA from Carleton University of Ottawa, Canada. Khashayar has vast dietetic and management experience in different countries and in many areas such as universities, long term care homes, acute care units, private practice, food industries, professional associations and journals. Khashayar currently works as Manager and Professional Practice Chief in Food & Nutrition Services Department at Baycrest.

Lisa Sokoloff is Professional Practice Chief, Speech-Language Pathology and Specialist, International Relations & IPE at Baycrest. She has 20+ years clinical experience in communication and swallowing disorders in adults/geriatrics. Lisa has lecturer status at University of Toronto, Dept of Speech Pathology. Lisa has published and presented internationally on topics in speech pathology and Interprofessional education. She has an MS (University of Wisconsin-Madison) and is registered with the College of Audiologists and Speech-Language Pathologists of Ontario.

Chef James Smith is a Professor at George Brown Colleges, Centre for Hospitality and Culinary Arts and Coordinator of a new Culinary Management Nutrition program. He has 20-plus years of experience in hospitality and tourism and has been an educator since 2003. James holds the Four Seasons Hotel
Award for Excellence in Cooking, the Canadian Red Seal Certificate, diploma in Culinary Management and an MBA in Hospitality and Tourism (University of Guelph).

**P3-33. A Strategy to Improve Use of Individualized Evidence-Based Patient Teaching by Students Enrolled in a Nursing Program**

- **Elizabeth Katrancha**, University of Pittsburgh at Johnstown, Johnstown, PA, USA
- **Becky Faett**, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- **Alice Blazeck**, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA

**Submitted abstract:**

**Background:** The Institute of Medicine’s (IOM) report, Best Care at Lower Cost advocates that teaching be structured to involve patients in decisions regarding their health care. The plan should be developed collaboratively and tailored to patient preferences. If not, patients may not accept the plan, complications may not be recognized, prescriptions may not be filled and medications taken in ways not prescribed. Although concepts central to patient teaching are introduced early in nursing programs, we observed that students were challenged when asked to provide discharge teaching individualized to the needs of their patient. We reasoned that exemplars (good approach / bad approach) would more optimally illustrate effective teaching strategies.

**Objectives:** To develop, implement and evaluate an innovative teaching strategy designed to enhance sophomore nursing students’ ability to assess patient teaching needs and provide evidenced-based teaching targeted to individual needs and preferences.

**Methods:** Four video supported interactive modules were produced to illustrate the importance, process, and benefits of individualized discharge teaching for common diagnoses – asthma resulting in admission to an emergency department; heart failure resulting in a hospital admission, new diagnosis of diabetes requiring insulin injections and complications of metastatic carcinoma. The videos, which used “patient” and “nurse” actors, were presented in 20 minute segments during post conferences held in conjunction with clinical experience. Faculty was trained in promoting student evaluation of positive and negative behaviors. To evaluate outcomes, 5 faculty and 25 students will be randomly selected to participate in focus groups after course completion. Focus groups will be led by faculty not associated with the project. Responses will be grouped into themes for use in evaluation of the project and structure and content of the sessions.

**Results/Implications:** Results of this project are pending and will be analyzed in April 2014.

**P3-34. Preparing a Collaboration Ready Healthcare Workforce: Assessing Interprofessional Readiness of Undergraduate Students**

- **Natalie Dipietro**, Ohio Northern University, Ada, OH, USA
- **Sara Terrell**, Ohio Northern University, Ada, OH, USA
- **Sue Monteneroy**, Ohio Northern University, Ada, OH, USA
- **Michelle Musser**, Ohio Northern University, Ada, OH, USA
- **Lisa Walden**, Ohio Northern University, Ada, OH, USA

**Submitted abstract:**

**Background:** Many students in health professions have limited exposure to learning across disciplines. Interprofessional Education (IPE) integration within undergraduate health care programs presents an
opportunity to foster professional skills necessary to working collaboratively. Faculty at a private Midwestern university from pharmacy, nursing, exercise physiology, and medical laboratory sciences implemented interdisciplinary case studies involving 227 undergraduate students in the fall semester of 2013. Cultural scenarios were chosen to reflect implications of diversity on health care. Students participated within interdisciplinary teams to discuss and design appropriate treatment plans within a problem-based environment.

**Objectives:** The purpose of the project was to assess students’ readiness for interprofessional education before and after exposure to interdisciplinary problem-based learning case studies. Additional objectives included: 1) provide opportunities for students to work collaboratively to solve cultural health care cases; 2) provide exposure to other health care disciplines; 3) improve curricular connectivity across disciplines; and 4) practice communication and decision making within a team situation.

**Methods:** Students were required to participate in 1-hour IPE sessions where a series of four cultural based scenarios were provided. Students worked in small interdisciplinary groups to discuss and formulate a team solution to the problems. One large group de-briefing followed. Students completed the *Readiness for Interprofessional Learning Scale* (RILS) before and after exposure to the IPE sessions. Data analysis was completed to determine differences between pre and post-test survey responses for individual students and between majors.

**Implications:** Exposure to IPE within undergraduate settings presents opportunities for students to practice skills necessary for successful patient-centered, team-oriented treatment. This project provides a foundation for educational redesign within the university under study and serves as a starting point for future discussions on enhanced IPE integration within the health care curriculum.

**Author Biographies**
Natalie A. DiPietro earned a Doctor of Pharmacy degree from Ohio Northern University and a Master of Public Health degree (Epidemiology concentration) from Indiana University-Indianapolis. She completed the Visiting Scientist Fellowship Program at Eli Lilly and Company in the Lilly Centre for Women’s Health. Currently Natalie is an associate professor of pharmacy practice at Ohio Northern University College of Pharmacy, teaching in the areas of public health and pharmacy administration.

Sara Terrell earned her Doctor of Philosophy degree from Eastern Michigan University and a Master of Science degree in Exercise Physiology from Eastern Michigan University. Sara has served as an assistant professor of Exercise Physiology at Ohio Northern University for eleven years, teaching courses in kinesiology, biomechanics, exercise programming for chronic disease, and sports nutrition. She also is involved in the university’s interdisciplinary disease state management and wellness initiatives.

Sue Montenero is currently the Interim Director of Nursing at Ohio Northern University. She received her Doctor of Nursing Practice degree from Duquesne University, a Master of Science in Nursing degree from Walden University, and a Bachelor of Science in Nursing from The Ohio State University. Dr. Montenero currently teaches medical surgical nursing, transcultural healthcare, nursing research, and pharmacology. Her research interests include active teaching strategies and faculty cultural competence.
P3-35. Communicating Interprofessional Education (IPE) in Health and Medical Sciences

- Elena Rudnik, Flinders University/University of South Australia, Adelaide, South Australia, Australia
- Eileen Willis, Flinders University, Adelaide, South Australia, Australia
- Sharon Lawn, Flinders University, Adelaide, South Australia, Australia
- Julie Ash, Flinders University, Adelaide, South Australia, Australia

Submitted abstract:
**Background:** The Health Industry and Universities must work together to produce graduates who will operate collaboratively in a complex and changing health care system. While progress has been made toward the identification of interprofessional practice (IPP) capabilities (Gum, et al., 2013) there is an absence of research evidence in relation to how to best teach IPP.

**Objective:** To develop a coordinated interdisciplinary approach to integrated IPP skills in the curriculum for a range of health undergraduate programs.

**Methods:** An evaluation consisting of a curriculum document review and interviews with current teaching academics to identify if and how IPP capabilities were being taught in topics offered through the Schools of Medicine and Health Sciences. Meetings with private and public health sector stakeholders allowed for discussions and benchmarking of IPP industry standards. The feasibility of multi-disciplinary communication topics that provide a foundation for IPP was explored through group discussion with course and topic coordinators. Identified issues, barriers and enablers for IPE were explored through discussion with an IPE interest group that had membership from across the Faculty of Medicine, Nursing and Health Sciences.

**Results:** There was an absence of specific reference to IPE or IPP capabilities in curriculum documents. Teaching and research academics identified a need for support and information about how to embed and teach IPP. A three stage transition for teaching IPP capabilities was documented. A need for a coordinated and consistent engagement of academics and students to achieve IPE teaching and research outcomes was identified.

**Implications:** The introduction of a University wide IPE reference group, appointment of an IPE academic, provision of multi-disciplinary topics with a clear IPE focus and a strategic IPE research agenda provides a mechanism for the advancement of IPE and therefore IPP in the health sector.

P3-36. Building the foundation for a culture of interprofessional education

- Mary Siniscarco, Utica College, Utica, NY, USA
- Catherine Brownell, Utica College, Utica, NY, USA

Submitted abstract:
**Background:** The mandate to incorporate interprofessional education into the prelicensure education of students in the health professions is clear; this is the challenge facing a small rural college in upstate New York. Three years ago, faculty developed introductory interprofessional community experiences partnering freshman with upper classmen in the skilled component of their programs. The program objective is to offer introduction to preparation and practice for health care professions, foster effective communication with peers and professionals and provide the foundation for interprofessional collaboration.
Interprofessional experiences take place in community settings including long-term care facilities, senior centers, medical day programming, Head Start, outpatient centers and private practices. To determine placements, students bid for the setting, provide a rationale for their request, and are interviewed by faculty to match professional interest with the optimal setting. Upper level students are paired where they can model practice, as well as provide leadership and mentoring. Every experience provides the opportunity to work with more than one health profession.

**Objectives and Methods:** Once placements are identified, mutual goals and schedules are established. Baseline data is collected: understanding of setting, perception of the professional roles and knowledge of scope of practice. Throughout the semester, students participate in their experience under the supervision of faculty. Upon completion, students are asked to respond to the same questions again.

**Results:** Initial data indicates students’ understanding of settings, roles and practice is limited, but significantly increases in scope and depth after these experiences. Students reported being part of “a team working towards the same goal” and “understanding the how nursing and PT/OT fit together”.

**Implications:** These experiences maximize the limited resources of a small, rural institution and provide health profession students a basic foundation in the concepts of interprofessional practice. The goal is to build these experiences throughout the curriculum, creating a culture of collaboration.

**Author Biographies**
Mary Sinisarcro, MS, OTR/L is Assistant Professor and Chair of Health Studies at Utica College. She joined the Health Studies department in 2007. Mary is also a Registered Occupational Therapist with over 20 years of clinical experience. Mary received her Bachelor’s of Science degree in Occupational Therapy from Utica College and her Master’s of Science degree in Health Education from SUNY Cortland. Mary’s research interests involve sensory integration intervention with self-injurious behaviors amongst individuals with developmental disabilities.

Catherine Brownell Ph.D., RN is Associate Professor and Chair of Nursing at Utica College. She joined the Department of Nursing in July 2002. She received a Ph.D. from Binghamton University in 2002. Cathy has a B.S. from SUNY Institute of Technology and Masters in Nursing from Syracuse University. Her research interests are in rural and community health as well as interprofessional education in baccalaureate. She has presented her research at national and international conferences.

**P3-37. Simulating A Hospital Ward Day Shift: A Student Interprofessional Education (IPE) Collaborative Learning Event**

- **Fiona Jensen**, University of Manitoba, Faculty of Nursing, Winnipeg, MB, Canada
- **Barbara Goodwin**, University of Manitoba, Faculty of Nursing, Winnipeg, MB, Canada
- **Robert Brown**, University of Manitoba, Faculty of Medicine, Winnipeg, MB, Canada

**Submitted abstract:**
**Background:** Interprofessional collaboration is an expected competency for many health professions upon graduation and is a skill that needs to be taught and experienced. An eight hour simulated ward day shift, where students from 3 health professions learned together, was planned and implemented as a pilot event to determine whether the event was a sustainable IPE learning opportunity.
**Methods:** Faculty representatives from Nursing, Medicine and Pharmacy worked together to plan the IPE event in a clinical simulation facility. Prior to the event, students were provided with a short handout, titled “What is IPE?”, which included the current working definition of IPE and the collaborative competencies. Eight patient scenarios were role-played by junior medical and nursing students. In advance, the IPE teams were grouped to include the patient, physician, nurse, pharmacist and a medical resident.

**Results:** On the morning of the event each patient scenario was shared for the first time and reviewed with the student patients. The students taking on the roles of Nurse, Physician or Pharmacist also were provided with their patient’s chart at the beginning of the shift. Shortly into the shift IP team rounds began which were facilitated by the Faculty representatives and a Medical Resident. During the shift each patient role-played a health incident which required collaboration between the IP team members for assessment and management.

**Conclusions:** During the de-brief sessions students responded to set questions and expressed many positive learning moments. By applying the criterion from the “Points for Interprofessional Education System” (PIPES) adapted from the University of Toronto, this event scored as a highly as a strong IPE event. We believe that we have a sustainable IPE collaborative learning opportunity, which can be embedded into the curricula, and has the capacity to grow to include more health profession faculties.

**Author Biographies**
Ms. Fiona Jensen is a Senior Instructor in the Faculty of Nursing at the University of Manitoba, Winnipeg, Manitoba. In addition to teaching in the undergraduate nursing program, focusing primarily on Gerontology, Fiona is the Interprofessional Education Coordinator in the Faculty of Nursing.

Ms. Barb Goodwin is an Instructor in the Faculty of Nursing at the University of Manitoba, Winnipeg, Manitoba. Barb is the Clinical Laboratory Coordinator and teaches in the undergraduate program.

Dr. Robert Brown is the Medical Director of the Clinical Simulation and Learning Facility in the Faculty of Medicine at the University of Manitoba, Winnipeg, Manitoba. Dr. Brown is also the Postgraduate Program Director for the Department of Anesthesia at the University of Manitoba.

**P3-38. Development of a Campus-wide Interprofessional Education Conference for Beginning Healthcare Providers**
- **Sharon K. Lanning**, Virginia Commonwealth University, Richmond, VA, USA
- **Alan W. Dow**, Virginia Commonwealth University, Richmond, VA, USA
- **Deborah DiazGranados**, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- **Kelly S. Lockeman**, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA

**Submitted abstract:**
**Background:** Although beginning healthcare providers may require a strong foundation in the principles of clinical collaboration before they enter supervised clinical practice, how best to teach these concepts is unknown.

**Objectives:** To describe the development and lessons learned from the creation of a year-long conference for beginning students \(N = 750\) across five health science schools (Allied Health, Dentistry,
Medicine, Nursing, and Pharmacy) for academic years 2012-13 and 2013-14. Learning goals were derived from Interprofessional Education Collaborative (IPEC) competencies.

**Methods:** The initial four-part conference (2012-13) followed one complex, elderly patient in four healthcare events. Senior level students presented their approach in the care of the patient and collaboration with others in the clinical setting.

The second five-part conference (2013-14) engaged interprofessional student teams through multiple case studies to explore concepts of collaborative practice, team membership, leadership and followership from the perspective of a “health care worker.”

Faculty observations, student feedback, and assessment of student learning around the IPEC competencies were used to refine conference content and educational methodologies.

**Results:** Based on feedback from the initial year, the conference evolved from large group discussion to small group interactions. To establish a strong foundation in the principles of clinical collaboration, conference content moved beyond the domain of ‘Roles and Responsibilities’ to the domains of ‘Teamwork’ and ‘Communication’. Topics included characteristics of health systems, identifying highly successful teams and team function, the context of healthcare teams, professional ethics, and scope of practice. Key components of success included effective facilitation skills, creation of interprofessional teams working longitudinally in collaborative learning environments, and development of clinical cases that foster active participation and are relevant to diverse professionals.

**Implications:** Using a continuous improvement approach, we developed a successful pedagogical model for interprofessional education that could be adopted for beginning healthcare providers at other institutions.

**Author Biographies**

Sharon Lanning, DDS, is an associate professor in the School of Dentistry. Her professional interests include the clinical practice and teaching of periodontics, curriculum design and development. Sharon has held leadership positions within the American Dental Education Association. Her research has been published in peer-reviewed journals such as the *Journal of Dental Education*, *Journal of Periodontology*, and *Patient Education and Counseling*.

Alan Dow, MD, MSHA, is an associate professor in the School of Medicine and assistant vice president of health sciences for interprofessional education and collaborative care. He leads the design, implementation, and assessment of major interprofessional programs across his campus which include five health science schools with over 3200 clinical health science students and a major academic health system. His research has been published in *Academic Medicine*, *The Journal of Interprofessional Care*, and *The Journal of Continuing Education in the Health Professions*.

Deborah DiazGranados, PhD, is an assistant professor in the School of Medicine. Her PhD is in Industrial and Organizational Psychology and expertise includes teams, team leadership, collaboration and understanding the implications of diversity on team effectiveness. Debbie’s research has been published in major peer-reviewed journals as *Journal of Applied Psychology*, *Academic Medicine*, *Current Directions in Psychological Science* and *The Joint Commission Journal on Quality and Patient Safety*.
P3-39. Survey and Video-Provoked Reflection to Assess an Interprofessional Education Series for Beginning Health Care Professionals

- Kelly S. Lockeman, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- Deborah DiazGranados, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- Alan W. Dow, Virginia Commonwealth University, Richmond, VA, USA

Submitted abstract:

Background: Before entering supervised clinical practice, students in the health professions must understand the principles of clinical collaboration in order to develop their skills as effective clinical team members. The Interprofessional Education Collaborative (IPEC) competencies have served as a guide for learning goals in the development of a campus-wide year-long interprofessional conference for beginning health care students in five professional schools at one university. Assessing the impact of this experience is critical, especially students’ ability to assess and provide feedback about team performance.

Objectives: The purpose of this presentation is to describe an assessment approach combining survey and video-based reflections to evaluate the effectiveness of the program at achieving the learning goals.

Methods: The interprofessional case series addresses all four of the IPEC competency domains through case studies or activities where students interact in interprofessional teams. Analyzing team performance is emphasized. A retrospective pre-post survey is used for all participants (N = 550). In addition, using a traditional pretest-posttest design, a smaller cohort of participants (n = 30) observes a team video and, through written reflection, describes team function and opportunities for improvement.

Results: Over 550 students have been participated in the case series and video pre-tests have been performed. Results from the post-test evaluations (survey and video) will be available in May, 2014.

Implications: The video-based approached represents a new modality of interprofessional assessment, and these findings overall, including the relationships between traditional survey data and cognitions assessed using videos and reflections, have implications for institutions seeking to understand the impact of interprofessional programs on students.

Author Biographies
Kelly Lockeman, Ph.D. is an assistant professor in the School of Medicine and assistant director for research and evaluation in the Center for Interprofessional Education and Collaborative Care. Her professional interests include research and evaluation methods, measurement, and educational outcomes. Her research has been published in Educational Gerontology and the Michigan Journal for Community Service Learning.

Deborah DiazGranados, Ph.D. is an assistant professor in the School of Medicine. Her PhD is in Industrial and Organizational Psychology and expertise includes teams, team leadership, collaboration and understanding the implications of diversity on team effectiveness. Debbie’s research has been published in major peer-reviewed journals as Journal of Applied Psychology, Academic Medicine, Current Directions in Psychological Science and The Joint Commission Journal on Quality and Patient Safety.
Alan Dow, MD, MSHA is an associate professor in the School of Medicine and assistant vice president of health sciences for interprofessional education and collaborative care. He leads the design, implementation, and assessment of major interprofessional programs across his campus which include five health science schools with over 3200 clinical health science students and a major academic health system. His research has been published in Academic Medicine, The Journal of Interprofessional Care, and The Journal of Continuing Education in the Health Professions.

P3-40. A Campuswide Approach to Structuring Interprofessional Education

- Alan W. Dow, Virginia Commonwealth University, Richmond, VA, USA
- Kelly S. Lockeman, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- Sharon K. Lanning, Virginia Commonwealth University, Richmond, VA, USA
- Peter Boling, Virginia Commonwealth University, Richmond, VA, USA

Submitted abstract:

**Background:** Graduating health professionals with the abilities to collaborate interprofessionally requires a sequence of coordinated educational experiences. Our institution committed resources two years ago to form the Center for Interprofessional Education and Collaborative Care which as charged with the coordination of planning, implementing, and evaluating interprofessional programs. This panel will describe the institution’s overarching framework for interprofessional education and the theoretical basis for, execution, and outcomes from three large curricular programs.

**Objectives:** This panel presentation is intended for faculty and administrators with program planning and/or evaluation responsibilities. Presenters will 1) describe the logic model to define and measure interprofessional education activities, 2) explain how assessment of individual learning experiences link the logic model and published interprofessional competencies, and 3) demonstrate how programs spanning the classroom, simulation center, virtual space, and community operationalize overarching interprofessional objectives and assessments of educational outcomes.

**Methods:** The theoretical basis for organizing interprofessional activities will be presented. Then, presenters will describe the creation of a logic model by interviewing faculty and administrators in each of the six professional schools to gather information about formal and informal interprofessional programs already in place, including using snowball sampling to identify additional individuals involved in interprofessional collaboration. Interview questions focused on goals; resources; types of students, faculty, and community organizations involved; activities; outputs and expected outcomes; and measures being used for assessment. These programs were then categorized by interprofessional competencies and level of learners. Then, three course directors from interprofessional courses will briefly describe their programs, including an introductory, year-long classroom-based course (550 students), an upper level simulation-based course (350 students), and an 11-week senior virtual case (550 students). Each course will be described within the context of the overarching university strategy for interprofessional education, and assessment data showing significant benefit will be presented.

**Results:** Across the campus, more than 25 sustainable interprofessional activities were identified, involving students at all levels and faculty and across all professional schools. Many of these activities involve service to the community, either locally, regionally, or internationally. While large-scale programs benefitted from centralized resources to support implementation and assessment, smaller programs provided richer, clinically based experiences. A cohesive approach to planning is apparent in some activities, but many smaller programs remain unintegrated with larger efforts.
Implications: Centralized planning can benefit interprofessional education efforts, especially for assessment. A logic model can inform campuswide planning and assessment and ensure that overarching goals are being met through the activities at the university.

Author Biographies
Alan Dow, MD, MSHA is an associate professor in the School of Medicine and assistant vice president of health sciences for interprofessional education and collaborative care. He leads the design, implementation, and assessment of major interprofessional programs across his campus which include five health science schools with over 3200 clinical health science students and a major academic health system. His research has been published in Academic Medicine, The Journal of Interprofessional Care, and The Journal of Continuing Education in the Health Professions.

Kelly Lockeman, Ph.D. is an assistant professor in the School of Medicine and assistant director for research and evaluation in the Center for Interprofessional Education and Collaborative Care. Her professional interests include research and evaluation methods, measurement, and educational outcomes. Her research has been published in Educational Gerontology and the Michigan Journal for Community Service Learning.

Sharon Lanning, DDS is an associate professor in the School of Dentistry. Her professional interests include the clinical practice and teaching of periodontics, curriculum design and development. Sharon has held leadership positions within the American Dental Education Association. Her research has been published in peer-reviewed journals such as the Journal of Dental Education, Journal of Periodontology, and Patient Education and Counseling.

Peter Boling, MD is professor and chair, Division of Geriatric Medicine at VCU School of Medicine where he has been involved in curricular reform and innovation for more than 2 decades. His work has centered on interprofessional models throughout his 30-year career which has predominantly involved team-based models of care for frail and at-risk older adults. He is the PI for the grant which funded the development of the case system and is co-leading its dissemination.

Tanya Huff, MSN, RN, CCRN is assistant professor of nursing at VCU School of Nursing.

P3-41. Interprofessional learning communities: Supporting the development of competencies and identity

- Susan Sterrett, Chatham University, Pittsburgh, PA, USA
- Susan Hawkins, Chatham University, Pittsburgh, PA, USA
- Anthony Goreczny, Chatham University, Pittsburgh, PA, USA
- Jodi L. Schreiber, Chatham University, Pittsburgh, PA, USA

Submitted abstract:

Background: This presentation is a case study of a two year curriculum implemented at a small U.S. university. Using the pedagogical framework of situated learning theory, students from five professions are formed into interprofessional communities on entry to their program. Over the course of two years, students meet in their communities four times, focusing on each of the IPEC core competency domains. Students are able to form relationships with other students in their community as they continue to meet over the two year period. Learners experience case study and role play among other activities within their developing interprofessional relationships.
**Objectives:**
1. Describe an IPE curricular design focused on the IPEC competencies and designed using a learning community model.
2. Demonstrate curricular design focused on IPEC core competency domains.
3. Identify strategies to develop core competency knowledge in this extracurricular format

**Methods:** This case study will discuss the process of development of this IP learning design from both a theoretical and practical standpoint. It will compare the Chatham model with that of a larger university, also using learning communities. Student perceptions of the experience will also be shared.

**Results:** Using learning communities, informed by situated learning theory, as the design for competency development allows students to develop a sense of interprofessional community and identity. Like Wenger’s (1998) communities of practice these communities allow for the development of relationships with students from other professions. Through mutual engagement and joint enterprise students develop a sense of an interprofessional identity, along with their professional identity. Wenger, E. (1998) *Communities of practice: Learning, meaning and identity.* Cambridge: Cambridge University Press.

**Author Biographies**
Susan Sterrett is Assistant Professor of Nursing at Chatham University, Pittsburgh, PA. She received a Bachelor of Science in Nursing (1975), Masters of Science in Nursing (1992), and Masters of Business Administration (1994) from Duquesne University, Pittsburgh, PA. In 2008, she completed her EdD in Higher Education Administration from the University of Pittsburgh. Dr. Sterrett’s practice settings include surgery, clinical education and community health nursing—Dr. Sterrett’s research interests center on interprofessional communities of practice.

**P3-42. Development of an IPE Curriculum Based on the Core Competencies: Challenges, Opportunities, and Research**
- **Anthony Goreczny**, Chatham University, Pittsburgh, PA, USA
- **Jodi Schreiber**, Chatham University, Pittsburgh, PA, USA
- **Melissa Bednarek**, Chatham University, Pittsburgh, PA, USA
- **Mary Hertweck**, Chatham University, Pittsburgh, PA, USA

Submitted abstract: **Background:** The primary diseases and disorders that currently affect most individuals are ones that require collaboration between various groups of individuals. These disorders can quickly overwhelm the current healthcare system, both financially and clinically. In order to treat individuals in the most effective and efficient manner in today’s healthcare environment, Interprofessional care and collaboration are necessary. Many professionals, however, upon entering the healthcare arena, find that they are not ready for those professional interactions. Thus, it is essential for colleges and universities to be incorporating Interprofessional education (IPE) into the curriculum of students in health professions educational programs. Few educators ever received any training in this area. Though that is changing, there is still a need for college and university educators to discuss together effective ways of incorporating IPE into programs that already seem overloaded and that can meet specific accreditation standards. Despite many challenges, we have been successful in developing an IPE curriculum and implementing it with students from five health professions – occupational therapy, nursing, physical therapy, physician assistant studies, and psychology.
**Objectives:** The primary objectives of this panel discussion are to highlight some of the successes we have had in our development as well as some of the challenges we have overcome, provide an overview of the IPE curriculum we have developed and how we included it without sacrificing other components needed for accreditation, and discuss some of our current research in the area.

**Methods:** Each of the panelists will discuss a unique aspect of our program as well as how we overcame some of the challenges. In order to ensure that we have an interactive session, each panelist has developed a specific question related to their topic designed to draw feedback and discussion among audience members. One topic includes the history of how we developed our collaboration efforts and the relevance of IPE to specific accreditations. We will look to involve audience members in a discussion of how they were able to develop IPE at their institutions. A second topic will include some of the barriers we encountered (and still encounter) as well as how we overcame them. Audience participation will include a discussion of what unique barriers different kinds of institutions might face. A third topic will be a discussion of our competency-based curriculum, with audience involvement centered on the kinds of IPE activities others are using at their institutions. The fourth topic will be a description of our use of technology in the IPE curriculum, with audience input on what social media and other technologies have assisted them. We will conclude with a brief description of several initial studies we have conducted, with a call for cross-institution collaborations. We have used this model previously, with feedback being one of the things they liked about our presentation was the interactive nature of it.

**Results and Implications:** Our expected result is a compendium of information that both new and established IPE educators can use back at their home institutions.

**Author Biographies**

Anthony Goreczny is a Pennsylvania licensed psychologist. He obtained his doctoral degree from Louisiana State University after completing an internship at Brown University Medical School. He is a Professor in graduate psychology at Chatham University, where he has worked since 1999. Dr. Goreczny is health psychologist with research interests in the area of interprofessional education, specifically on competency development and assessment as well as quantification of outcomes.

Susan Sterrett is Assistant Professor of Nursing at Chatham University, Pittsburgh, PA. She received a Bachelor of Science in nursing (1975), Masters of Science in Nursing (1992), and Masters of Business Administration (1994) from Duquesne University, Pittsburgh, PA. In 2008, she completed her EdD in Higher Education Administration from the University of Pittsburgh. Dr. Sterrett’s practice settings include surgery, clinical education and community health nursing –Dr. Sterrett’s research interests center on interprofessional communities of practice.

Melissa Bednarek is an Assistant Professor of physical therapy at Chatham University. She joined the faculty in 2009. She has a MPT from MCP Hahnemann University and a Ph.D. in Physiology from Virginia Commonwealth. She also completed her DPT from Chatham University. Her areas of interest include cardiovascular and pulmonary physical therapy, acute care physical therapy, and pulmonary rehabilitation.

Susan Hawkins is an Associate Professor of physician assistant at Chatham University. She received her MSEd from Duquesne University and has been a member of Chatham’s faculty since 1996. One of her primary areas of interest is problem-based learning in physician assistant education. She is currently the PBL Coordinator for the physician assistant program at Chatham.
Jodi Schreiber is a graduate of the University of Pittsburgh where she received both a Master of Science (1998) and Bachelor of Science degree in Occupational Therapy (1991). Jodi has provided occupational therapy in most practice settings; this includes hospitals, nursing homes, private homes, rehabilitation centers, and preschools. Her primary interests are in neuroscience, the diseases/syndromes associated with the brain and spinal cord, and Low Vision Rehabilitation.

P3-43. Inter-Professional and Inter-Institutional Rural Healthcare Track

- David Plundo, Des Moines University, Des Moines, IA, USA

Submitted abstract:
Background: Des Moines University, in response to the increasing cost of medical education, lower insurance reimbursements in rural practices, and the high debt load of students preventing them from entering rural practices created a rural track program for its osteopathic medical students in 2008 by providing full tuition scholarships to students in exchange for practicing four years in rural Iowa following completion of a primary care residency. In 2012, students from Des Moines University’s Podiatric Medicine program, Physician Assistant program, and Nurse Practitioner students from the University of Iowa joined the Rural Track program. All programs provided full tuition scholarships to students taking part in the program with the requirement of one year of service in rural Iowa for every year of full tuition scholarship. In 2013 students from Des Moines University’s Doctor of Physical Therapy program also joined the rural track program bringing the number of healthcare programs to five and the number of students in the program to thirty.

Objectives: Participants will become aware of the unique nature of rural healthcare and the skill sets they will require to practice in a rural setting. Participants will begin to understand the collaborative nature of healthcare in rural communities.

Methods: The students were required to participate in additional didactics sessions on a number of Saturdays in their first two years of school dealing with the unique aspects of rural medicine as well as completion of a four-week rural preceptorship in the summer between their first and second year of medical school. They were also required to complete 50% of the third and fourth year clinical rotations in rural areas.

Results: The initial class is now completing the second year of their primary care residency. Thirty-two osteopathic medical students have entered the program since 2008 and all are still participating.

Author Biographies
David A. Plundo, DO, MPH, FACOFP received his undergraduate degree in Biology from the University of Pittsburgh along with his DO degree in 1985 from Des Moines University. Completing a Family Medicine residency he returned to Des Moines University moving from Assistant Professor of Family Medicine to Associate Dean for Clinical Affairs to Associate Dean for Medical Education. He became responsible for the creation of the Area Health Education Center (AHEC) program and Rural Healthcare Track for the University.

P3-44. Incorporating Basic Sciences into Residency Curriculum using an Inter-professional Grand Rounds Format

- David Plundo, Des Moines University, Des Moines, IA, USA
- Terri Plundo, Des Moines University, Des Moines, IA, USA
• Donald Matzke, Des Moines University, Department of Anatomy, Des Moines, IA, USA

Submitted abstract:
**Background:** Des Moines University’s Graduate Medical Education Residency Consortium looking for a way to incorporate basic sciences into the residency program’s curriculum adapted a program that already existed in the medical school curriculum, an inter-professional team-taught case study. This was being team taught between the Clinical Medicine course and the Anatomy course, both of which included students from the programs of osteopathic medicine, podiatric medicine, and physical therapy.

**Objectives:** The resident will begin to evaluate clinical disorders understanding the anatomical basis of the disorder. The resident will become aware of the value of other healthcare providers in the care of their patients.

**Methods:** Using Physician Assistants and Physical therapists from the corresponding programs at Des Moines University along with an Anatomist from the Anatomy department we presented a case of Urinary Incontinence to the family medicine, internal medicine, and surgery residents. Presentation of the case by the Physician Assistant was followed by a review of the pelvic anatomy including the applicable musculature and innervation. This was followed by the physical therapist that reviewed non-surgical and non-medicinal approaches to the problem. The session concluded with the Physician Assistant discussing the medications available for use along with questions and answers.

**Results:** Evaluations showed the residents not only learned about the medical approach to incontinence but many were unaware of the value that the physical therapist could provide. Nearly all had forgotten the anatomical basis of the disorder and how understanding the anatomy could help decide the best treatment approach for the patient. Overwhelmingly they requested similar presentations incorporating the basic sciences.

**Author Biographies**
David A. Plundo, DO, MPH, FACOFP received his undergraduate degree in Biology from the University of Pittsburgh along with his DO degree in 1985 from Des Moines University. Completing a Family Medicine residency he returned to Des Moines University moving from Assistant Professor of Family Medicine to Associate Dean for Clinical Affairs to Associate Dean for Medical Education. He became responsible for the creation and oversight of the Graduate Medical Education Residency Consortium.

Terri L Plundo, DO, FACOFP received her undergraduate degree from the University of Toledo along with her DO degree in 1992 from Des Moines University. After completing a Family Medicine residency and practicing in Toledo Ohio she returned to Des Moines University as a Medical Director of the University Clinic and Assistant Professor of Family Medicine coordinating the Clinical Medicine course.

**P3-45. Interprofessional Case Studies as an Inaugural Interprofessional Education Event**
• Michael Adams, Campbell University, College of Pharmacy & Health Sciences, Buies Creek, NC, USA
• Laura R. Gerstner, Campbell University, College of Pharmacy & Health Sciences, Buies Creek, NC, USA
• Victoria S. Kaprielian, Campbell University, School of Osteopathic Medicine, Buies Creek, NC, USA
• **D. Byron May**, Campbell University, College of Pharmacy & Health Sciences, Buies Creek, NC, USA
• **Wesley D. Rich**, Campbell University, College of Pharmacy & Health Sciences, Buies Creek, NC, USA

**Submitted abstract:**
Using case studies for Interprofessional Education (IPE) is standard in established programs. We report that extracurricular case study events are a simple and cost effective tool for start-up where no formal IPE exists. In contrast to didactic course offerings, well designed case studies are exciting, cultivate interest, and develop champions for IPE among students and faculty. Our objective is to describe the use of case studies as our initial step in developing a formal IPE program. Campbell University is a private institution that has recently expanded its health science offerings to include physician assistant, public health, and osteopathic medicine in addition to a well-established pharmacy program. The rapid expansion of health education programs and the inclusion of IPE in accreditation standards provided a unique opportunity for the launch of formal IPE programming. Campbell Interprofessional Case Studies (CICS) bring together small groups of students from any academic year of the programs listed above to address the chief complaint of a standardized patient. Students work together to interview the patient, review physical exam and laboratory data, develop a care plan, and counsel the patient. Each student group has two faculty facilitators from different disciplines. Cases are constructed so that discipline specific skills are used to promote learning from each other. Self-reported satisfaction from facilitators and students has been positive. Student comments reveal that they see the benefit of interprofessional collaboration in providing the best clinical outcomes for patients. Commonly described barriers including larger group sizes and depth of clinical knowledge have not been reported as significant impediments for this volunteer effort. Participating in a multi-year group of students allows less experienced students to see the direct application of foundational and clinical skills learned in each program. We feel that this model reflects realistic interprofessional practice. Further IPE programing will be briefly described.

**Author Biographies**
Dr. Michael L. Adams is Associate Professor and Assistant Dean for Graduate and Interprofessional Education at Campbell University College of Pharmacy & Health Sciences. He has been charged with the task of leading the development of a formal interprofessional education program including pharmacy, physician assistant, public health, and osteopathic medical students at Campbell University.

Dr. Victoria Kaprielian is Professor and Associate Dean for Faculty Development and Medical Education at the Campbell University School of Osteopathic Medicine. Before joining this new school in 2013, she spent 23 years on the faculty of Duke University, where she played a leading role in developing Duke’s first interprofessional courses for health professions students. She has worked extensively in multiple levels of medical education, Physician Assistant, and Doctor of Physical Therapy programs.

**P3-46. Developing a Longitudinal Interprofessional Curriculum For a New Medical School From The Ground Up.**
• **David Trinkle**, Virginia Tech Carilion, School of Medicine, Roanoke, VA, USA
• **Jennifer Page**, Virginia Tech Carilion, School of Medicine, Roanoke, VA, USA
• **Richard Vari**, Virginia Tech Carilion, School of Medicine, Roanoke, VA, USA
Submitted abstract:
Background and Objective: In 2010, the Virginia Tech Carilion School of Medicine (VTCSOM) opened its doors to its inaugural class. Prior to opening, a unique curriculum was developed for a small class (42 students) centered on four over-arching content domains (basic science, clinical science, research, interprofessionalism). The school was innovative by valuing all four domains as equals with constructing appropriately balanced schedules and assessment requirements for each curricular block. Each domain was to develop a curriculum that was integrated vertically with the other domains and horizontally throughout the four year curriculum. A collaborative team with our nearby Jefferson College of Health Sciences, in particular the nursing and physician assistant programs was formed to develop a unique interprofessional curriculum. There were many hurdles to overcome, not the least of which were differing academic calendars. Our goal was to find a way to integrate our curricula as appropriate with real in-class and small group collaborative courses where interprofessional students are teaching and learning about each other’s professions rather than just providing opportunities for different student bodies to learn “content” together. A longitudinal, integrated program at VTCSOM was perhaps more doable given that the school was new, with an innovative curriculum roadmap built from the ground up by faculty and administrative collaboration without traditional structural “silo” barriers. A year-long Interprofessional Leadership (IPL) curriculum was developed which included first year medical students, first year physician assistant students, and now accelerated nursing students focusing on objectives and activities dealing with healthcare teamwork, professional roles, scopes of practice, communication techniques, leadership and followership; many of which now correlate with the Interprofessional Education Collaborative (IPEC) core competencies. Over time in IPL we have greatly reduced didactics and panels and replaced delivery of objectives through group activities with a trained faculty facilitator. The second year interprofessionalism courses include experiential programs with healthcare teams, simulated team experiences, an ethics course with other health profession students, a humanities course and a public health course. All of these incorporate clear interprofessional objectives that are also in line with IPEC core competencies. They deliver content in a variety of ways often through team activities and discussions, team papers, and online wikis. During the final two years of our curriculum (clerkship and elective years), we assess students on their teamwork and leadership skills using interprofessionalism objectives. We continue to deliver an interprofessional focus daily through experiences and clinical work and also through specific learning experiences that have interprofessional objectives such as Domain Days and the Dean’s Colloquium. We have now had a four year experience with our Interprofessionalism Domain Curriculum. VTCSOM graduates its first class in May of 2014. Students apply to our school noting how we stand out for our research and interprofessionalism domains. This session will review the rationale and the development of our interprofessionalism domain and its four year curriculum, substantial problems and changes that have occurred during this time especially in response to student evaluations, successes and challenges in fulfilling our desire to fully integrate our domain with other domains, a review of student evaluation trends and the overall evolution of the curriculum and the domain. Unanticipated issues and consequences arose with this innovative domain and its roll-out. These issues will be discussed in detail in an interactive audience participatory format including students, faculty and administrators from VTCSOM.

Author Biographies
Dave Trinkle, M.D., FAPA is currently Associate Dean of Community and Culture, Associate Professor of Psychiatric Medicine, and Program Director of the Geriatric Psychiatry Fellowship Program at Carilion Clinic and the Virginia Tech Carilion School of Medicine (VTCSOM). He is also an Associate Professor with the University Of Virginia School Of Medicine and Via College of Osteopathic Medicine. He is the Geropsychiatric Consultant to the Geriatric Assessment Clinic at Carilion Clinic Center for Healthy Aging, the League of Older Americans, and to numerous Nursing Homes in the Roanoke Valley. He helped
develop and lead the Carilion Center for Healthy Aging, a multidisciplinary team based center for geriatric patients and their families, where he is based and continues to actively see and consult patients.

Richard C. Vari, Ph.D. has been the Founding Associate Dean for Medical Education at the Virginia Tech Carilion School of Medicine (VTCSOM) in Roanoke, VA., since April 1, 2008. He has been heavily involved in curriculum design, management, and student assessment during a 20-year career in medical education. At VTCSOM he also directed the development of a four-year longitudinal curriculum in interprofessionalism healthcare education and served as the Founding Chair of the Department of Interprofessionalism for two years.

P3-47. Student Perceptions of Interprofessional Learning in an Interprofessional Capstone Course: A Qualitative Study

- Leander Sheila, Saint Louis University, St. Louis, MO, USA
- Ginge Kettenbach, Saint Louis University, St. Louis, MO, USA
- S. Maggie Maloney, Saint Louis University, St. Louis, MO, USA
- Irma Ruebling, Saint Louis University, The Center Interprofessional Education & Research, St. Louis, MO, USA

Submitted abstract:

**Background:** An Interprofessional (IP) faculty team evaluated a team-based, capstone service-learning IP practicum. Students in the practicum represented 10 health professions.

**Objectives:** The study’s purpose was twofold: a) to determine student perceptions of the IPE practicum and their ability to articulate beliefs, emotions and behaviors they experienced in IP teamwork, b) to assess student comfort and effectiveness in communicating with peers and others in the service community.

**Methods:** This qualitative study analyzes a critical reflection assignment from the course in 2010-2011. A random stratified sample of 39/275 entries was selected in random fashion. The IP research team included faculty from Nursing, Occupational Therapy, Physical Therapy, Social Work and Public Health. An inductive qualitative process was used to identify themes in the data.

**Results:** Researchers identified nine code families or themes: interprofessional education (IPE) outcomes, course objectives, culture/community engagement, client/patient-centered, beliefs, emotions, behaviors, team process and barriers. Representative quotes were identified to further illustrate these themes.

**Implications:** The results of this study indicate that students are able to articulate beliefs, emotions and behaviors related to IP teamwork when they reflect on IPE classes and experiences. Critical-reflection assignments indicated that students learned multifaceted lessons about IP teamwork that they believe will serve them in future clinical practice situations. Qualitative inductive analysis for evaluation, as well as inclusion of a team-based, IP service-learning capstone practicum, could be valuable to other IPE programs that wish to provide a real-life IP learning experience for their students and evaluate their students’ IP learning.
Author Biographies
Sheila A. Leander, R.N., Ph.D. earned a doctorate in Nursing at University of Missouri – Columbia. Following a 23-year career in nursing practice and management, Dr. Leander entered academics. Her qualitative dissertation investigated the experiences of minority living kidney donors. She has been involved in qualitative and quantitative research about kidney donation, health care equity, and health profession education. She is Assistant Professor in the School of Nursing and coordinates an accelerated BSN program.

Ginge Kettenbach, PhD, PT, earned her doctorate in Curriculum and Instruction at Saint Louis University. Her dissertation research included use of qualitative research techniques, studying clinical education in physical therapy. She has also conducted survey research. She is an associate professor in the Program in Physical Therapy located in Doisy College of Health Sciences at Saint Louis University. Her areas of research include interprofessional education, health professional education, and physical therapy clinical education.

S. Maggie Maloney, Ph.D., OTR/L, is Assistant Professor and Vice Chair in the Department of Occupational Science and Occupational Therapy in Doisy College of Health Sciences at Saint Louis University. She has published several qualitative studies investigating the development of occupational therapy student skills through service-learning experiences. She has been a group facilitator for the Interprofessional Education capstone course. She has also conducted research related to university students’ levels of stress, anxiety, alcohol use.

P3-48. Just a Taste: How to Organize an IPE Day

- Heather Congdon, University of Maryland, School of Pharmacy, Rockville, MD, USA
- Lisa Lebovitz, University of Maryland, School of Pharmacy, Baltimore, MD, USA
- Richard Dalby, University of Maryland, School of Pharmacy, Baltimore, MD, USA
- Paula Raimondo, University of Maryland, Health Sciences and Human Services Library, Baltimore, MD, USA

Submitted abstract:
Background: IPE is becoming an important focus for many academic health centers, as accreditation guidelines are driving this change by mandating IPE as part of curricula. Ideally IPE will be an integral part of all professional programs, but as with any innovation the concept has to start small.

Objectives: To successfully plan and implement a university-wide interprofessional education (IPE) day at the University of Maryland Baltimore (UMB).

Methods: UMB formed a “task force” comprised of associate dean-level representatives and alternates from all schools on this academic health center campus. This level of administrator was chosen for their ability to communicate with and generate interest among their faculty and students, to secure resources and to overcome logistical obstacles such as scheduling. The task force assigned member roles and began planning more than a year in advance. Current IPE courses and projects were inventoried, IPE Day proposal guidelines were drafted and faculty were invited to submit proposals for IPE Day activities. The task force organized a faculty development day prior to IPE Day that included training on IPE core competencies and best practices, presentation of accepted proposals, and an activity whereby faculty analyzed how their proposals include the core competencies and best practices. A registration survey
was designed and built to collect enrollment preferences and data on IPE knowledge and confidence. A post-IPE Day panel discussion was scheduled for faculty participants to debrief their experiences.

**Results:** The inaugural IPE Day was an overwhelming success with nine collaborative activities presented by 40 faculty to another 60 faculty observers and 300 student participants. Post-event comments were very positive. Another IPE Day is being planned.

**Implications:** Clearly there is an interest in interprofessional education at UMB. Limitations included varying levels of commitment from schools that were reflected in their participation numbers.

**Author Biographies**
Heather Brennan Congdon, PharmD, BCPS, CDE, is the Assistant Dean for Shady Grove and an Associate Professor in the Department of Pharmacy Practice and Science at the University of Maryland School of Pharmacy. Further, she serves as a Co-Director for the University of Maryland Center for Interprofessional Education and the Chair for the Committee on Interprofessional and Interdisciplinary Education Strategies. Dr. Congdon teaches and provides medication management for underserved patients in interprofessional collaborative clinics.

**P3-49. Moving Ahead with Interprofessional Education: The Road Taken**

- **Kathryn Hayward,** Dalhousie University, Halifax, NS, Canada
- **Shauna Houk,** Dalhousie University, Halifax, NS, Canada
- **Adele Leblanc,** Dalhousie University, Halifax, NS, Canada
- **Kim Hebert,** Dalhousie University, Halifax, NS, Canada

**Submitted abstract:**
**Background:** It is well recognized that in order to prepare students for practice in the clinical settings, students need to have opportunities to learn about, from and with one another. This will enable effective collaboration and improved health outcomes. In June 2011, the Dean of Faculty of Health Professions circulated a document entitled, Moving Ahead with Interprofessional Education, which was the culmination of ongoing discussions within and between the Faculty's Schools. Each School was given the mandate to operationalize the vision and policy obtained within this document.

**Objectives:**
- To develop and implement a comprehensive IPHE program within the School of Nursing
- To collaborate with other faculties, schools, partner agencies and community to develop meaningful and relevant IPHE experiences for over 800 nursing students.
- To develop a method of recording and tracking student IPHE experiences

**Methods:** Building on the work of previous initiatives, a School of Nursing Interprofessional Health Education Working Group was established in October 2011 to develop a school specific policy and procedural guidelines for the organization and tracking of interprofessional experiences. In January 2012 a new interprofessional program was introduced to the students. An Interprofessional Coordinator role was implemented to facilitate the process.

**Results:** In three months the working group successfully developed a working policy that included procedural guidelines for both students and faculty. A virtual learning environment was created to
facilitate delivery of the program and an electronic evaluation was developed to assess program delivery, and program outcomes.

**Conclusions:** The program was successfully launched in January of 2012. The first evaluation of the program took place May 2013 with a small cohort. Further evaluations will be sent in March with this year’s graduates.

**Author Biographies**
Kathryn Hayward is a nurse and IBCLC. She teaches at Dalhousie University in a variety of courses retaining her primary passion for teaching in pediatrics and families—both in the classroom and in the clinical simulation laboratory. She also has the role of Coordinator of IPHE. In this role, she collaborates with other health professional schools and faculties, and the community, to develop, promote and facilitate IPHE events and learning opportunities for 800 plus nursing students.

Ms Houk is the Assistant Director, Undergraduate Studies. Her practice background is in adult and pediatric critical and emergency care. Her research interests include student assessment and evaluation, professional practice, quality care and accountability. As an Assistant Professor, clinical instructor and program facilitator Ms Houk has been involved with the development and implementation of curriculum, program planning and evaluation, and the delivery of education to undergraduate and continuing education students for the past 14 years.

- **Susan Sommerfeldt,** University of Alberta, Faculty of Nursing, Edmonton, AB, Canada
- **Vera Caine,** University of Alberta, Faculty of Nursing, Edmonton, AB, Canada

**Submitted abstract:**
**Background:** Interprofessional (IP) teams are essential in health care delivery. While patient outcomes are often at the forefront in measuring the impact of IP practices, evidence is needed to support theories that scaffold IP practice models. In this paper we explore considerations of performativity in theorizing the practices of healthcare teams.

**Objectives:** Through applied theatre, knowledge was co-created with participants. We paid particular attention to the relational and embodied knowledge that was evident in the interactions within healthcare teams. We gained insight on what contributes to processes and team identities that influence both their performance and performativity.

**Methods:** Applied theatre following forum theatre tradition (Boal’s Theatre of the Oppressed) brought together participants (n=8) to engage in conversations and acting for insights into the struggles, antecedents and conflict transformations that happen in the process of engaging in IP teams. Individual participant conversations informed the structure. Scenes were developed and performed for an observer who proposed interventions to avert the staged pivotal catastrophe. The opened spaces created through forum theatre generated dialogue and understandings about performativity. Insight was gained drawing on multiple methods of analysis, including visual, discourse, and thematic analysis.

**Results:** Specific points of struggle were identified collaboratively with participants. Resonant strands centred in team experiences that shaped team performativity include circumstances of administration,
reporting structures, role confusion, team definition, personalities, task orientation, processes of disambiguation, influences of power and historical constructions.

**Implications:** Differentiating performance from performativity may contribute to conversations within teams about valuing aspects that shape healthcare team culture and add to theory development. Clarity in team performativity and an ability to work with, rather than resolve, points of struggle is crucial to further practices of IP healthcare teams.

**Author Biographies**
Susan Sommerfeldt is a PhD candidate and Faculty Lecturer in the Faculty of Nursing, University of Alberta, Edmonton, Canada. Along with IP research teams, Susan has been involved with establishing IP Clinical Learning Units and other IP education research initiatives. Research interests include relational aspects of interprofessionalism in practicing healthcare teams, student preparation for IP practice and patient teamwork. She teaches student IP healthcare team development and community nursing courses.

Dr. Vera Caine is an Associate Professor and CIHR New Investigator in the Faculty of Nursing, University of Alberta, Edmonton, Canada. As a narrative inquirer Vera has integrated arts based methods into her research. In her research Vera works in the field of HIV with indigenous people and people in precarious housing situations. Her particular interest in interprofessional practices is in community settings with a focus on working across institutional boundaries.

**P3-51. Integrating interprofessional educational into advanced practice health professions curricula**

- **Debra Liner,** University of Washington, School of Nursing, Seattle, WA, USA
- **Mayumi Willgerodt,** University of Washington Bothell, Bothell, WA, USA
- **Brenda Zierler,** University of Washington, School of Nursing, Seattle, WA, USA
- **Peggy Odegard,** University of Washington, School of Pharmacy, Seattle, WA, USA
- **Erin Blakeney,** University of Washington, Center for Health Science Interprofessional Education, Research and Practice, Seattle, WA, USA

**Submitted abstract:**

*Background:* Replicability and sustainability are major challenges in interprofessional education (IPE). Large scale event-based IPE initiatives can be labor intensive, logistically challenging and require participation by large numbers of interprofessional faculty. While these large-scale events have been successful in making IPE visible, sustaining them over time is not feasible without commitment of resources and significant curricular changes. Thus, it is imperative that IPE be more integrated into existing curricular structures where it can become permanent and sustainable in health professions education.

*Objectives:* The purpose of this presentation is to share how our team has successfully and systematically integrated IPE competency-promoting activities (e.g. panels, cases, modules) into existing coursework of advanced practice students. We will showcase four existing courses where IPE activities were integrated to enhance course content and to increase collaborative learning opportunities for advanced practice students. We will highlight the lessons learned from our previous IPE initiatives that guided our current strategies.
Methods: The presentation will begin with an overview of existing IPE needs and challenges at the UW, followed by the lessons learned from previous grant funded IPE projects. We will explicate the process and utilization of IPE Faculty Scholars to successfully integrate IPE while minimizing course faculty burden. Examples of our IPE activities will be illustrated; unfolding cases and approaches for building teamwork competencies by changing assignments within existing courses and thereby minimizing the burden of total course redesign will be described. Our presentation will follow the outline below:

1. Introduction and Overview of Session
2. IPE Challenges and Lessons Learned
3. Utilizing IPE Faculty Scholars to Engage and Support Course Faculty
4. Faculty Development for Facilitating IPE activities
5. Overview of IPE integration by changing assignments and adding sub-objectives
6. Description of IPE for advanced health professions students
   - Minimizing Change: TeamSTEPPS in medication safety
   - Coping with Students in different locations: On line case/discussion board in geropharmacology
   - Bringing families into IPE: Technology assisted case discussion and in-person family panel
   - Weaving IPE throughout entire course: Team case discussions in advanced practice nursing
   - Involving primary care providers in IPE: Team based care in an unfolding ethical case in an interprofessional event

Results: Participants will leave the session with an understanding of concrete strategies on how interprofessional education and clinical activities can be incorporated into existing curricula.

Implications: This session can serve as a model for replication at other institutions.

Author Biographies
Debra Liner, BA, PMP, is program manager for the University of Washington’s (UW) Center for Health Sciences Interprofessional Education, Research and Practice (CHSIERP). While at UW she has managed objectives for three multi-year training grants— one focusing on faculty development in the use of technology, second on training interprofessional undergraduate students, and third focusing on technology enhanced IPE for advanced practice students. Ms Liner also manages CHSIERP’s website featuring online lessons, faculty training toolkits and a technology blog.

Mayumi Willgerodt PhD, MS/MPH, RN is a 2013 Macy Foundation Faculty Scholar and is focused on advanced practice nursing and dental partnerships that bridge the academic to practice gap in IPE. Her area of expertise and scholarship include interprofessional education and team based care, particularly with underserved and vulnerable children and families. Dr. Willgerodt was a 2011 UW IPE Teaching Scholar working with Dr. Brenda Zierler. She practices as a school nurse in Seattle.

Brenda Zierler, PhD, RN is leads two HRSA training grants - one focusing on faculty development in the use of technology and the second grant focusing on technology enhanced IPE for advanced practice students. She is Co-Director for the UW Center for Health Sciences Interprofessional Education, Practice and Research and Associate-Director of the UW Institute for Simulation and Interprofessional Studies (ISIS). Dr. Zierler is a Board Member of the American Interprofessional Health Collaborative.

Peggy Odegard, PharmD, is a Certified Diabetes Educator and Clinical Pharmacist with extensive experience working in team-based healthcare. Currently, she is Professor and Chair in the School of
Pharmacy at the UW where her teaching and research emphasizes diabetes, aging, and interprofessional education. She has published over 60 refereed manuscripts, chapters, and abstracts. Prior to her current position, Dr. Odegard was the clinical pharmacy services manager for a 200-bed community hospital.

P3-52. Launching your IPE trajectory: Beginner to champion to leader

- Jennifer Danielson, University of Washington, School of Pharmacy, Seattle, WA, USA
- Mayumi Willgerodt, University of Washington Bothell, Bothell, WA, USA
- Brenda Zierler, University of Washington, School of Nursing, Seattle, WA, USA

Submitted abstract:
Background: Integration of IPE requires both individual and structural change. Redesigning curricula to integrate IPE requires champions and change agents who can influence others. Teaching students from multiple health professions together requires new and different skills for many faculty. Faculty development is essential to effect long term and meaningful change. This presentation will describe the developmental trajectory of faculty who participated in a training/mentoring series to showcase how institutions can build change from within.

Objectives:
1. Discuss potential professional trajectories that faculty can follow to become innovators and leaders of IPE within their institutions.
2. Describe essential professional development opportunities faculty need to implement curricular redesign for IPE.

Methods: Through the story of two experienced teachers, this presentation will describe components of their faculty development in integrating IPE in health professions curricula. Presenters will describe how they moved from exposure to IPE in the classroom to training as an IPE teaching scholar, and then to leading educational redesign at their University. They will describe new teaching and leadership skills gained and the need to be thoughtful and intentional in IPE activities to ensure acceptability and sustainability. Last, they will describe how the content and timing of their faculty development was effective in establishing them as leaders and successful, education innovators. The presentation will conclude with recommendations for faculty moving into leadership roles.

Results: Participants will gain a greater understanding of the need to retool the workforce for interprofessional teaching. Presenters will offer their professional storylines as evidence for the transformational leadership opportunities inherent in IPE.

Implications: Others involved in implementing IPE at their institutions will gain useful and practical ideas for approaching faculty development, an essential component of IPE. This presentation will showcase how faculty development prepares change agents to education “collaboration ready” healthcare professionals.

Author Biographies
Jennifer Danielson PharmD, MBA has worked in pharmacy education since 1996 and became involved in IPE in 2010. Her years of practice as a certified diabetes educator grounded her in the importance of interdisciplinary practice. Through her work as an IPE teaching scholar, she gained the skills necessary to be a point person for her profession in IPE efforts at the University of Washington--a large academic health center with 6 health science schools.
Mayumi Willgerodt PhD, MS/MPH, RN is a 2013 Macy Foundation Faculty Scholar whose work is focused on advanced practice nursing and dental partnerships that bridge the academic to practice gap in IPE. Her area of expertise and scholarship include interprofessional education and team based care, particularly with underserved and vulnerable children and families. Dr. Willgerodt was a 2011 UW IPE Teaching Scholar under Dr. Brenda Zierler and practices as a school nurse in Seattle.

Brenda Zierler, PhD, RN leads two HRSA training grants - one focusing on faculty development in the use of technology and the second grant focusing on technology enhanced IPE for advanced practice students. She is Co-Director for the UW Center for Health Sciences Interprofessional Education, Practice and Research and Associate-Director of the UW Institute for Simulation and Interprofessional Studies (ISIS). Dr. Zierler is a Board Member of the American Interprofessional Health Collaborative.

P3-53. 'My Electronic Shadow and I'; Using Service Users, Carers and 'Textwall' to Enhance Interprofessional Learning

- Dora Howes, Glasgow Caledonian University, Glasgow, Scotland, UK
- Jamie McDermott, Glasgow Caledonian University, Glasgow, Scotland, UK
- Nichola Mclarnon, Glasgow Caledonian University, Glasgow, Scotland, UK

Submitted abstract:
Background: The need to involve users and carers in service delivery to improve health and social care outcomes has been an enduring element within policy directives in the United Kingdom (Petch et al., 2013). Users and carers, working in partnership with health and social care professionals, are regarded as facilitating coherent and effective service delivery. In addition, user and carer involvement is seen as a means of enhancing understanding of professional roles, teamwork, communication and responsiveness to those who use the service (Petch, 2012). A key component of Level 1 interprofessional education at Glasgow Caledonian University involves students having the opportunity to learn from service users and carers in the classroom. However, entering into an authentic dialogue with service users and carers in an interprofessional context can be a daunting task within a large group facility where 500 healthcare and social work students are in attendance.

Objectives/Methods: This poster details an innovative approach using an audience response system known as ‘text wall’. Sending messages through their mobile phones, students can explore concepts and issues and ‘talk’ to service users and carers. The messages appear immediately on a screen beside the presenter, who can then respond and often prompt further dialogue.

Results: The poster will provide examples of interactions between service users and carers and students to demonstrate the authentic nature of the dialogue achieved using such innovative technology, as well as the positive feedback received from both presenters and students. Using this approach, presenters gain a genuine connection with the audience, while novice adult learners are proactive without feeling overwhelmed by their environment or other students. Often, this interaction represents the first steps in developing service user and carer relationships based on compassion, empathy and respect.
References

Author Biographies
Dora Howes - after qualifying in 1984, Dora spent nine years in clinical practice within a general medical setting. She entered higher education in 1993 where she developed the first post-registration top-up degree for nurses in Lanarkshire. She then transferred to Glasgow Caledonian University in 2000 to focus on pre-registration nurse education. She has been involved with interprofessional education since 2004 and is currently co-module lead for one of the biggest interprofessional modules in Scotland.

Jamie McDermott is currently Programme Leader for the MSc (pre-registration) Occupational Therapy degree at Glasgow Caledonian University. He is interested in learning and assessment methods in IPE and more generally in how students use academic feedback to improve their academic performance. Jamie is currently a PhD candidate at GCU where his research is focused on Consultant Allied Health Professionals and how they contribute to care of people with long term conditions.

Nichola McLarnon is a senior lecturer in Podiatry and Learning, Teaching and Quality Lead for the Department of Psychology, Social Work and Allied Health Sciences at Glasgow Caledonian University. She is module leader for the first year interprofessional module for allied health and social work students – delivered to 1000 students, crossing 16 disciplines and 2 institutions.

P3-54. It's Good to Text: Using Text Messaging to Transform the Traditional Large-scale Lecture in Interprofessional Learning

- Jamie McDermott, Glasgow Caledonian University, Glasgow, Scotland, UK
- Nichola McLarnon, Glasgow Caledonian University, Glasgow, Scotland, UK
- Dora Howes, Glasgow Caledonian University, Glasgow, Scotland, UK

Submitted abstract:
Background: Contemporary curricula in the health and social care professions are increasingly focussed on interprofessional education and practice (IPE/P) as a key aspect of learning and preparation for professional practice. At Glasgow Caledonian University (GCU), where IPE/P forms a core spine across sixteen professional disciplines/fields of practice, it has been necessary to modernise traditional teaching methods to meet the desired aim of delivering IPE/P at scale. In doing so, the use of mobile phones, and specifically text messaging, was explored as a learning tool. While the literature highlights that the use of text messaging has gained widespread popularity in higher education (McLean et al, 2010), application in an interprofessional education context has received limited attention. This poster outlines how text messaging as a learning tool was embedded within one IPE/P module where large lectures were an established part of the learning and teaching strategy.

Objectives: This poster outlines how:
- Text messaging was implemented the large lecture environment
- Text messaging can be used to empower students
Methods: The use of ‘Textwall’ (www.textwall.co.uk) was implemented in a Level 1 undergraduate IPE module. Evaluative data, from students, gathered through the normal module evaluation process is presented was obtained. Evaluative data was also gathered from teaching staff on the module.

Implications: The evaluation highlighted that:

- Students found the use of text messaging and Textwall to be empowering
- Increased communication and engagement was facilitated as a result of using Textwall
- Staff concerns about the potential for misuse of text messaging/Textwall were unfounded

References

Author Biographies
Jamie McDermott is currently Programme Leader for the MSc (pre-registration) Occupational Therapy degree at Glasgow Caledonian University. He is interested in learning and assessment methods in IPE and more generally in how students use academic feedback to improve their academic performance. Jamie is currently a PhD candidate at GCU where his research is focused on Consultant Allied Health Professionals and how they contribute to care of people with long term conditions.

Nichola McLarnon is a senior lecturer in Podiatry and Learning, Teaching and Quality Lead for the Department of Psychology, Social Work and Allied Health Sciences at Glasgow Caledonian University. She is module leader for the first year interprofessional module for allied health and social work students – delivered to 1000 students, crossing 16 disciplines and 2 institutions.

Dora Howes - after qualifying in 1984, Dora spent nine years in clinical practice within a general medical setting. She entered higher education in 1993 where she developed the first post-registration top-up degree for nurses in Lanarkshire. She then transferred to Glasgow Caledonian University in 2000 to focus on pre-registration nurse education. She has been involved with interprofessional education since 2004 and is currently co-module lead for one of the biggest interprofessional modules in Scotland.

P3-55. Inter Professional Education: What Does Health Informatics Management, Dental Hygiene And Optometry Has In Common?

- Sajeev Kumar, University of Tennessee Health Science Center, Memphis, TN, USA
- James Venable, Southern College of Optometry, Memphis, TN, USA
- Susan J. Daniel, Old Dominion University, G. W. Hirschfeld School of Dental Hygiene, Norfolk, VA, USA
- Rebecca Reynolds, University of Tennessee Health Science Center, Memphis, TN, USA

Submitted abstract:

Background: The rapid growth of information technology innovations is having a great impact on the profession of Optometry and Dental Hygiene. These innovations include technologies such as high-capacity digital networks, powerful computer hardware and software, high-resolution digital image compression, the Internet, very high data speeds, enabling faster and lossless image transmission. Telemedicine and e-Health are gaining momentum in both the professions. Despite some attention to these advances, many educators are still not fully embracing these advances in the informatics field and

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their growing importance to practice or the delivery of curriculum. In the following section, integration of Informatics into an optometry and dental hygiene program is discussed. The aim is to discuss concepts and topics that would be essential for integration of health informatics into Optometry (Optometry Informatics) and Dental Hygiene (Dental Informatics) and to present an approach currently being utilized at the Southern College of Optometry and University of Tennessee Health Science Center, at Memphis, Tennessee.

**Method:** The value and effectiveness of the interprofessional education is evaluated by content analyzing email questions received from the students and the students’ answers to the pre and post survey questions.

**Observations:** Data analysis of survey responses reveals having informatics as a curriculum positively affected student learning. Training tools and methodology are further analysed.

**Conclusion:** The use of Informatics will be a key element in the future delivery of eye health and dental care and the continued success of clinical practices. It is also essential to include these technologies and practices in the educational curricula itself. Not only will Informatics improve the quality of care, patient experiences and business practices; it will help ensure the continued success of the clinical practice in an increasingly discerning and competitive marketplace.

**Author Biographies**

Sajeesh Kumar PhD., is an Associate Professor in the Department of Health Informatics & Information Management, College of Allied Health Sciences, UTHSC-Memphis. Dr. Kumar has a doctoral degree in Medical Informatics. Dr. Kumar’s research focuses on design and development of telemedicine technology, health education technologies and health informatics technology evaluation. Dr. Kumar has travelled to more than 30 countries and has extensive international experience in healthcare, education and research works. Dr. Kumar has been involved in healthcare activities in Pittsburgh-USA, Australia, Singapore, Netherlands, Seychelles, United Arab Emirates and India. He has won several research awards, edited several books on telemedicine, published book chapters and scientific papers in high impact journals. Dr. Kumar holds an impressive record of competitive research funding and research awards. In his free time he is involved in flying small airplanes, music and voluntary social service to the needy.

**P3-56. Comparison of Differing Interprofessional Education Activities to Assess Student Outcomes**

- **Leamor Kahanov**, Indiana State University, Terre Haute, IN, USA
- **Lindsey Eberman**, Indiana State University, Terre Haute, IN, USA
- **Kenneth Games**, Indiana State University, Terre Haute, IN, USA

**Submitted abstract:**
The ability to work in interprofessional teams is critical for the delivery of quality, safe health care; yet the effect of material delivery is vague. We assessed student perception of two interprofessional education (IPE) activities: case study day (CS) and a health care reform project (HCR). Students were from varying disciplines (CS= 162, HCR=218 students): athletic training (entry-level and post-professional, physician assistants, medicine, nursing, dietetics, social work, etc). For each activity, faculty collaborated to develop and implement. The CS activity brought together a faculty team (over 4 months) to develop 3 case studies. The HCR project was developed by one primary faculty member,
shared with others, and the group finalized the plan prior to the start of the semester. Students attended a lecture on HCR and then collaborated in groups to develop an executive summary. We evaluated student readiness for healthcare collaboration before and after the CS activity using the Collaborative Healthcare Interdisciplinary Relationship Planning (CHIRP) Scale. We evaluated characteristics of interprofessional activity delivery after the HCR activity. Using SPSS (Version 18), we analyzed data with descriptive statistics, a paired t-test and one-way analyses of variance to compare disciplines. We identified a significant 5.9% increase ($t_{161}=-10.822, \ p<0.001, \ ES=0.756$) in CHIRP scores in the CS activity (pre-test=61.8±6.8, post-test=65.7±6.3). We did not identify a main effect for time*discipline ($F_{1,160}=1744.7, \ p=0.697, \ 1-\beta=0.057$). In the HCR activity, we identified significant differences between disciplines on overall experience ($F_{4,223}=4.151, \ p=0.003, \ ES=0.073$). We sought additional information about the perceived barriers to completion and while students reported communicating (2.6±1.2) and scheduling (2.1±1.1) as difficult, they did not report any difficulties using various methods of communication. Although we were unable to compare these activities statistically, we are able to infer that IPE activities improve student readiness for collaborative healthcare, particularly when faculty collaborate and invest in the activities.

P3-58. Transitioning to Andragogy Model Within Interprofessional Education

- Lindsey Eberman, Indiana State University, Terre Haute, IN, USA
- Leamor Kahanov, Indiana State University, Terre Haute, IN, USA
- Kenneth Games, Indiana State University, Terre Haute, IN, USA

Submitted abstract:
By definition, a pedagogical curriculum is a method for “leading a child” through education. While this perspective may be optimal for the development of children, autonomous, self-driven education engagement is desired beginning in adolescence. The current curricula for undergraduate and professional programs implement a pedagogical framework, which may not optimally engage adult students. Therefore, the purpose of this presentation is to describe an interprofessional engagement model from andragogical theory. Adult students learn differently and have different motivations for learning than children. The adult learner is autonomous and self-directed, goal-oriented, has accumulated life experiences that influence application of knowledge, and requires relevancy and choice in their learning. Adult learners are motivated in education and classroom activities based on interest rather than the general curiosity observed in children. Many adult learners want to immediately apply the knowledge gained into their everyday lives as a means of increasing self-efficacy and respect within their chosen profession. Instruction for adults should stress process over content which will allow them to see the relevance of the knowledge they are gaining. Providing quality care in health professions results in using traits related to andragogical instruction. Notable andragogy concepts that teach empathy are encountered in professional practice include: equality, trust, openness, care and commitment, mutual respect and integrated thinking and learning. An andragogical model provides direct connections between didactic and clinical instruction and offers curricula more flexibility, as compared to the current curricular structure. Interprofessional concepts should be directly and immediately connected to kinesthetic activities, community engagement opportunities, and clinical experiences. We will present examples of interprofessional andragogy activities between and among multiple professions to demonstrate a single model of preparing future professionals for the current needs of the workforce.
P3-59. Continuing Interprofessional Education for the 21st Century Learner

- **Sharla King**, University of Alberta, Health Sciences Education and Research Commons, Edmonton, AB, Canada
- **Elizabeth Taylor**, University of Alberta, Faculty of Rehabilitation Medicine, Edmonton, AB, Canada
- **Shawn Drefs**, University of Alberta, Faculty of Rehabilitation Medicine, Edmonton, AB, Canada

Submitted abstract:

**Background:** Health professionals require continuing education opportunities that go beyond basic workshops or in-services. Increasingly, they seek university credit or an additional graduate degree to support their practices and maintain credibility within the workforce. The University of Alberta has created two types of learning opportunities to meet this need: 1) the Faculty of Rehabilitation Medicine created 4 graduate-level certificate programs in the areas of Pain Management, Stroke Rehabilitation, Diagnostic Imaging for Physical Therapy and Francophone Practice for Speech Language Pathology; and 2) the Faculty of Education and Health Science faculties collaborated to offer a Master of Education in Health Sciences Education (MEd HSE) program, a course-based masters for clinical educators interested in educational pedagogy, educational research and interprofessional leadership within the context of communities of practice of professional educators. Both the certificate programs and MEd HSE are offered as fully online or blended learning opportunities to allow health professionals to remain at home to earn the credentials.

**Objectives:** The purpose of this presentation is to describe these learning opportunities and the outcomes of the evaluation that have been conducted.

**Methods:** Evaluation of all programs has occurred at the end of the each course and at the end of Year 1 and Year 2 cohorts for the MEd HSE program. Evaluation included student surveys, focus groups, individual interviews, instructor interviews and stakeholder feedback.

**Results:** Outcomes from the student surveys, focus groups and individual interviews, as well were the instructor and stakeholder feedback will be provided.

**Implications:** Health professionals undertake continuing education opportunities to achieve a meaningful outcome, both for personal learning and career advancement. However, it is clear from early results that Graduate level course credit and MEd opportunities that can be completed at home on a part-time basis, meets the needs of the 21st century continuing education learner.

**Author Biographies**

Dr. Sharla King is an Assistant Professor in the Department of Educational Psychology and Program Director for the MEd in Health Sciences Education program, Faculty of Education and the Director of the Health Sciences Education and Research Commons at the University of Alberta. Dr. King has worked in the area of interprofessional education for the past 10 years. Her research interests relate to interprofessional education and student team interactions, blended learning and simulation education.

Dr. Elizabeth Taylor is an Associate Professor in the Department of Occupational Therapy, and Associate Dean Professional of Programs and Teaching in the Faculty of Rehabilitation Medicine, University of Alberta. She holds a Doctorate in Education and teaches community development and mental health in occupational therapy. She has been a consultant in education for the Canadian Association of Schools of
Nursing, the Canadian Physical Therapy Association and the Ontario Government Graduate School Council.

Shawn Drefs coordinates the Faculty of Rehabilitation Medicine’s continuing professional education programs at the University of Alberta. His education includes a Business Administration Diploma, BSc and MSc degrees from the University of Alberta. Shawn has been involved in numerous research initiatives funded by a variety of agencies, such as the Alberta Heritage Foundation for Medical Research, Canadian Health Services Research Foundation, Alberta Health, National Centers of Excellence, and Alberta Health Services.

The University of Alberta created two types of learning opportunities to meet the needs of continuing education learners: 1) certificate programs; and 2) a Master of Education in Health Sciences Education program, a course-based interprofessional program. Both programs are offered as fully online or blended learning opportunities to allow health professionals to remain at home to earn the credentials. The purpose of this presentation is to describe these learning opportunities and the outcomes of the evaluation conducted to date.

P3-60. Early learners’ perceptions of interprofessionalism

- Sharla King, University of Alberta, Health Sciences Education and Research Commons, Edmonton, AB, Canada
- Heidi Bates, University of Alberta, Faculty of Agriculture, Life and Environmental Sciences, Edmonton, AB, Canada
- Sheny Khera, University of Alberta, Faculty of Medicine and Dentistry, Edmonton, AB, Canada
- Karen Peterson, University of Alberta, Faculty of Nursing, Edmonton, AB, Canada

Submitted abstract:

**Background:** Learners shape their personal and professional identities as they move through professional education programs. This transition in identify occurs along a continuum described as ‘fixed to flexible’ ways of knowing (Baxter Magolda, 2004). The concept of a ‘fixed to flexible,’ way of knowing is inherent in epistemological reflection (ER) and is characterized by learners acquiring information by synthesizing expert opinion, existing evidence, as well as their own and others experiences (Baxter Magolda, 2004). Students graduating from health professional programs will be practitioners in self-regulating professions, therefore engaging in self-directed learning, reflection and self-assessment is required (Mann, 2008). Consequently, describing the experiences of early learners in health professional practice education programs is critical to understanding their evolution and growth as a professional.

**Objectives:** The purpose of this study was to understand: 1) the perceptions of health science students at the end of their first year in their professional practice education program related to interprofessionalism and 2) their interprofessional learning experiences to date.

**Methods:** Semi-structured interviews were conducted with students at the end of first year in their professional program. Students were asked to share their thoughts about what is an interprofessional team, what factors create an effective team and their learning experiences so far.

Multiple case studies were used to examine the “within-case analysis” and “cross-case analysis” which entails looking for themes, patterns and conceptualizations across all cases. Thematic analysis principles used for both within-case analysis and cross-case analysis.
**Results:** Thirteen students participated in the interviews. Preliminary analysis of the data identified initial themes related to the competencies (communication and role clarification); and a shift in perspective. Key themes will be reported and discussed.

**Implications:** Understanding early learners’ interprofessional experiences can help shape the development of learning experiences to guide their transition into the workforce collaborative practice ready.


**Author Biographies**
Dr. Sharla King is an Assistant Professor in the Department of Educational Psychology and Program Director for the MEd in Health Sciences Education program, Faculty of Education and the Director of the Health Sciences Education and Research Commons at the University of Alberta. Dr. King has worked in the area of interprofessional education for the past 10 years. Her research interests relate to interprofessional education and student team interactions, blended learning and simulation education.

Heidi Bates is a Registered Dietitian and Director of the University of Alberta Integrated Dietetic Internship. Her team is responsible for managing the professional practice training of all students seeking careers as registered dietitians in Alberta. The internship provides planned work experience opportunities to internationally-trained dietitians hoping to enter the Canadian workforce, and to Canadian-trained dietitians re-entering practice after a leave.

Dr. Sheny Khera is an Assistant Professor in the Department of Family Medicine at the University of Alberta, Edmonton and has a Masters degree in Public Health from the Harvard School of Public Health, Boston. She teaches in the undergraduate curriculum in the Faculty of Medicine & Dentistry and is a community based family physician and Director of the Misericordia Family Medicine Centre, Edmonton. Research interests are in Medical Education and fostering Interprofessionalism.

**P3-61. Student Reflections: Insights on Interprofessional Team Learning**
- **JoAnne Davies,** University of Alberta, Health Sciences Council, Edmonton, AB, Canada
- **Elizabeth Taylor,** University of Alberta, Faculty of Rehabilitation Medicine, Edmonton, AB, Canada
- **Christopher Ward,** University of Alberta, Division of Medical Laboratory Science, Edmonton, AB, Canada
- **Rosemarie Cunningham,** University of Alberta, Division of Medical Laboratory Science, Edmonton, AB, Canada

**Submitted abstract:**
**Background:** Twelve interprofessional health science programs on a university campus collaborate to offer a mandatory, multi-section course on Interprofessional (IP) Health Team Development, taken simultaneously by over a thousand students early in their programs. Working in small IP teams, students learn effective team processes and build IP competencies (communication, collaboration, role clarification, reflection, patient-centered care). Integrated reflection activities help students explore IP concepts throughout the 10 classes. A course-end student reflection includes discussion of key learnings
about IP care, implications for future practice, development as individuals and as teams in the various activities, and overall impressions about the course.

**Objectives:**
1. Provide an overview of the course, the final reflection assignment, and resources that support students in writing reflections
2. Describe the qualitative data analysis process used to review the reflections
3. Summarize major themes arising in student reflections
4. Present findings as evidence of student IP skills development
5. Discuss implications for course improvements and future IP education program development

**Methods:** At the end of the course all students (1000+) were asked to complete an online research consent form. A research assistant gathered and anonymized 100 course-end student reflection assignments that received consent. A four-person research team reviewed the assignments using an established qualitative data analysis technique.

**Results:** Common themes identified related to development of IP competencies, impact of IP teamwork on patient care/future practice, and the value of various learning activities in the course.

**Conclusions:** The course supports the development of IP team competencies early in pre-licensure health science programs. Placement of this type of learning is critical early in professional development. Suggestions for course improvements and further IP educational opportunities for students are identified.

**Author Biographies**
Dr. JoAnne Davies is the Interprofessional Education Manager with the Health Sciences Education and Research Commons at the University of Alberta. Her role involves collaborating with health science faculties and practice organizations to develop and coordinate interprofessional educational opportunities, including an interprofessional health team development course taken by over 1000 students annually. Dr. Davies has a background in educational psychology and elearning and has managed educational programs at the university for over 15 years.

Dr. Elizabeth Taylor is an Associate Professor in the Department of Occupational Therapy, as well as Associate Dean Professional of Programs and Teaching in the Faculty of Rehabilitation Medicine at the University of Alberta. Her teaching areas are in mental health and interprofessional education. Her research interests are in interprofessional education, community mental health including PTSD in the military. She is the past President of the Canadian Association of Occupational Therapists.

Christopher Ward is an associate professor of Laboratory Medicine and Pathology at the University of Alberta where he teaches Transfusion Medicine and Immunology in the Medical Laboratory Science program. He loves collaborating with other disciplines in an interprofessional context and facilitating small group learning.

P3-62. Multi-Institution Collaboration to Develop an Interprofessional Education Video-Based Curriculum: Walking the Talk of Interprofessional Collaboration
- **JoAnne Davies**, University of Alberta, Health Sciences Council, Edmonton, AB, Canada
- **Martie Grant**, Northern Alberta Institute of Technology, Edmonton, AB, Canada
• Petra Duncan, University of Alberta, Edmonton, AB, Canada

Submitted abstract:

Background: Health science educators at postsecondary institutions and practice colleagues in a Canadian city have been networking for several years regarding approaches to interprofessional education. Educators identified a need to create more engaging, authentic, interprofessional education curriculum for early health science students. They determined that a custom video case study could provide examples of a wide variety of practice environments, professional roles and authentic collaborative practice situations. An invitation to participate in this project resulted in the formation of a project team from multiple institutions, including individuals in a wide variety of roles such as instructors, health professionals, standardized patient trainers, and video production specialists. The group developed a detailed case study on a woman who receives a continuum of care (emergency, acute, rehabilitation, continuing/home care) with a wide variety of professionals involved in her care. The project team produced a dozen video modules, each focusing on specific interprofessional skills (e.g. communication, role clarification, collaboration, conflict management, reflection, patient-centred care). A teaching guide and other supporting print materials were also developed.

Objectives:
1. Describe/display excerpts of the materials created
2. Explain the collaborative process of completing this project
3. Describe implementations of this curriculum
4. Provide evaluation methods/results
5. Explain plans for future enhancements/recommendations for future implementation
6. Discuss implications for future interprofessional education curriculum development

Methods: Feedback will be gathered from implementation sites via surveys and focus groups.

Results: A summary of student/instructor feedback will be provided.

Conclusions: Collaboration among a wide network of professionals has many benefits, including enabling production of curriculum materials that provide early learners with a broad survey of authentic health care situations. A modular approach to curriculum design provides flexibility in enabling the curriculum to be implemented in various ways.

Author Biographies

Dr. JoAnne Davies is the Interprofessional Education Manager with the Health Sciences Education and Research Commons at the University of Alberta. Her role involves collaborating with health science faculties and practice organizations to develop and coordinate interprofessional educational opportunities, including an interprofessional health team development course taken by over 1000 students annually. Dr. Davies has a background in educational psychology and elearning and has managed educational programs at the university for over 15 years.

Martie Grant is the Interprofessional Education Coordinator and Faculty at the Northern Alberta Institute of Technology, in Edmonton Alberta. She has a primary role in developing an Interprofessional Education initiative at this Polytechnic Institute, including new curriculum that launched winter 2014 to 150 students, faculty development and practicum interprofessional placements. Martie has a background in Adult Education (M.Ed), Diagnostic Medical Sonography and Laboratory Medicine. She is interested in education for professionalism in the healthcare professions.
As Standardized Patient Educator, Petra Duncan recruits and trains Standardized Patients (SPs) for the SP Program, in the Health Sciences Education and Research Commons at the University of Alberta. She supports educators in the use of SP methodology and collaborates with health educator’s to promote interprofessional education using simulation. Her background is in acting, directing, producing and script writing. Coupled with her business experience, she provides expertise from both ends of the spectrum.

P3-63. Integrating IPE into "Pre-Professional" Educational Experiences using Case Studies

- **Kenneth Games**, Indiana State University, Terre Haute, IN, USA
- **Lindsey Eberman**, Indiana State University, Terre Haute, IN, USA
- **Leamor Kahanov**, Indiana State University, Terre Haute, IN, USA

Submitted abstract:
In today’s health care settings, providers are expected to approach the complex challenges facing health care within interprofessional teams. This allows each profession to practice within their scope of practice while providing the patient with the highest level of care. The interprofessional education community has often waivered on the best place to start integrating this paradigm into our curricula, but most educators and clinicians would argue that the first year of pre-professional education (prior to entering the professional education phase) might provide an opportunity to prevent potential barriers to interprofessional health care delivery. Introducing interprofessional education at the onset of education may better shape a more collaborative discipline specific professional identity. To explore this concept, undergraduate students in an introduction to health professions explored case studies of patients with various comorbidities requiring the use of interprofessional health care teams. Students applied course content by selecting the appropriate health care professional for each patient complaint and explaining why this complaint was best addressed by the selected health care professional. To prepare students for the case study activities, students experienced an interactive lecture to define the various health professions, their scopes of practice, and the educational expectations of each discipline. Guest speakers also came to the class for question and answer sessions regarding his/her respective profession. These activities achieved the delivery of the Roles/Responsibilities Competencies for Interprofessional Collaborative Practice: demonstrating knowledge of one’s own role and the roles of other professions to appropriately assess and address the health care needs of the patients and populations served. We will present ideas on how to integrate interprofessional education early into pre-professional studies.

P3-64. Institutional Learning About, From and With Each Other for Interprofessional Education Curriculum Implementation

- **Amy Blue**, University of Florida, Gainesville, FL, USA
- **Andrea L. Pfeifle**, University of Kentucky, Lexington, KY, USA
- **Rob Rockhold**, University of Mississippi Medical Center, Jackson, MS, USA
- **James Ballard**, University of Kentucky, Lexington, KY, USA

Submitted abstract:
**Background:** As IPE expands, the need for sharing resources and expertise amongst institutions increases to avoid “reinventing the wheel.” Regional collaborations offer opportunity for exchange, and through exchange, learning about implementation adaptations to fit institutional culture. The Southeast Consortium (SEC) for Interprofessional Education (IPE) is a regional consortium composed of 5
institutions developing common curricular materials for implementation in each institution. The multiple institutional cultures within the consortium have provided participants with a broader depth of IPE curricular implementation issues that could be of value to others.

**Objectives:** This presentation’s objective is to describe lessons learned with implementation of IPE curricular materials across multiple unique institutional settings.

**Methods:** In the SEC-IPE, we developed curricular modules through collaborative efforts. Discussions about each institution’s implementation approach have highlighted contextual features to consider when implementing IPE. Several challenges have arisen and the consortium’s approach to resolving them can inform and influence others who engage in a similar process.

**Results:** Lessons for implementation include: 1) placement of materials within curricula structure: embedding material within existing profession specific courses (students come together through these courses) vs. creating a stand-alone IPE activity; 2) selection of learning format: face to face vs. online vs. blended learning, and synchronous vs. asynchronous; 3) IPE learning focus: degree to which subject content is balanced with development of IP collaborative competencies; 4) integration of IPE learning within full curricula: replacing existing vs. adding new content; 5) culture of implementation: the balance of ‘top down” mandates for IPE and faculty grassroots efforts to support and grow the work.

**Implications:** Our lessons learned from a regional collaborative approach for IPE curricular implementation can be instructive for institutions implementing IPE. Deployment of common quantitative and qualitative evaluation instruments is underway to uniformly assess core IPE competences and attitudes, particularly in the dimension of professionalism.

**Author Biographies**

Amy V. Blue, PhD: Dr. Blue is the Associate Vice President for Interprofessional Education at the University of Florida (UF) and has been engaged in interprofessional education (IPE) program development and assessment for several years, including establishment of the IPE program at the Medical University of South Carolina. Dr. Blue represents UF as a member of the Southeastern Consortium (SEC) for Interprofessional Education (IPE) project funded by the Josiah Macy Foundation.

Andrea Pfeifle, EdD, PT: Dr. Pfeifle is the Director of the Center for Interprofessional HealthCare Education, Research & Practice at the University of Kentucky. In this role, she works with a multiple campus constituencies in the implementation and assessment of IPE activities. Dr. Pfeifle is the principal investigator on the Southeastern Consortium (SEC) for Interprofessional Education (IPE) project funded by the Josiah Macy Foundation.

Rob Rockhold, PhD: Dr. Rockhold is the Deputy Chief Academic Officer at the University of Mississippi Medical Center and represents the University of Mississippi in the Southeastern Consortium (SEC) for Interprofessional Education (IPE) project funded by the Josiah Macy Foundation.

**P3-65. Interprofessional Education Program Development: Lessons from the Trenches**

- **Amy Blue,** University of Florida, Gainesville, FL, USA
- **Benjamin Chesluk,** American Board of Internal Medicine, Philadelphia, PA, USA
- **Lisa Conforti,** American Board of Internal Medicine, Philadelphia, PA, USA
- **Eric Holmboe,** Accreditation Council for Graduate Medical Education (ACGME), Chicago, IL, USA
Submitted abstract:

**Background:** With the expansion of interprofessional education (IPE), the establishment of programs to develop and implement activities increases. Given resource needs and the complexities of IPE, new and existing programs can learn from other programs to enhance success and sustainability of their efforts.

**Objectives:** The objectives of this presentation are to 1) describe results from a project examining IPE program development; and 2) identify best practices for sustainable IPE programs.

**Methods:** In-depth interviews that focused on experiences implementing IPE and lessons learned that could benefit other programs were conducted with 20 US and Canadian IPE program leaders. Through an iterative and constant comparative method, interview data were content analyzed for cross-cutting themes and commonalities, as well as exceptions to the themes.

**Results:** Common challenges faced in implementing new IPE programs include the logistical complexity of synchronizing schedules and curricula across profession-specific departments. The very existence of an IPE program is frequently viewed as its main success. Recommendations from respondents include: a) build a central hub within the institution for IPE; b) articulate a strategic vision that shows how IPE relates directly to what learners will need to learn to care for patients; c) work to engage faculty and preceptors from throughout the institution; d) network with other institutions and the US national IPE center to learn from other programs; e) build assessment and evaluation into the implementation plan from the beginning; and f) obtain input from employers and provider organizations to connect IPE activities with the demands learners will face upon entering into practice.

**Implications:** IPE program development is an intensive, evolutionary process. Sustainability is imperative for the work to “take hold” at both institutional and national levels. Lessons learned from others can facilitate success and long term viability for programs.

**Author Biographies**

Benjamin Chesluk, PhD: Dr. Chesluk is a research associate at the American Board of Internal Medicine and has been engaged in multiple research projects related to assessment of physician competency. Most recently, he has developed a multi-source teamwork assessment instrument for hospitalist physicians. This presentation is based on a project funded by the Robert Wood Johnson Foundation of which Dr. Chesluk served as a co-principal investigator.

Amy V. Blue, PhD: Dr. Blue is the Associate Vice President for Interprofessional Education at the University of Florida and has been engaged in interprofessional education (IPE) program development and assessment for several years, including establishment of the IPE program at the Medical University of South Carolina. This presentation is based on a project funded by the Robert Wood Johnson Foundation of which Dr. Blue served as the principal investigator.

Lisa Conforti, MPH: Ms. Conforti is a research associate at the American Board of Internal Medicine and is engaged in multiple research projects related to assessment of medical resident and physician competency. This presentation is based on a project funded by the Robert Wood Johnson Foundation of which Ms. Conforti served as a co-principal investigator.
P3-66. Healthcare Professional Student Perspectives about Interprofessional Education

- Jake Weatherly, Yale University, School of Medicine, New Haven, CT, USA
- Eve Colson, Yale University, School of Medicine, New Haven, CT, USA
- Gillian Graham, Yale University, School of Nursing, West Haven, CT, USA
- Paula Schaeffer, Yale University, School of Medicine, New Haven, CT, USA

Submitted abstract:

**Background:** The Yale Schools of Medicine and Nursing and the Yale Physician Associate (PA) Program are collaborating to implement an interprofessional curriculum. Although healthcare organizations have called for interprofessional education (IPE), such initiatives have been difficult to implement. Per the Kern framework of curriculum development, design and implementation is likely to be more successful if a needs assessment is done as the first step.

**Objectives:** To better understand healthcare professional students’ perspectives about IPE as part of a needs assessment for developing an IPE curriculum.

**Methods:** Because little is known about stakeholder perceptions of IPE, we used a qualitative, grounded theory approach. We conducted in-depth, semi-structured interviews of students from the three health professional programs at Yale. Sixteen students were selected using purposeful sampling. Interviews were audiotaped, transcribed and stored in Atlas-ti. Members of an interprofessional team individually conducted open coding of transcripts. Codes were compared using an iterative process and constant comparative method, resulting in “emerging categories.” Data collection at this stage stopped when a saturation of concepts and codes were reached.

**Results:** Many emerging concepts were identified, including a number of potential facilitators and barriers to IPE. Among facilitators were students’ positive perceptions of teamwork as essential for optimum patient care and safety, as well of a desire to better understand possibilities for complementariness and interchangeability of roles. Among barriers were the perceived persistence of hierarchy among healthcare professionals and student concerns about buy-in of IPE from various stakeholders. Examples of these and other concepts will be shared in the presentation.

**Conclusions:** Our study shows potential facilitators and barriers to IPE from the perspective of healthcare professional students. These perceptions will inform curriculum development improving the likelihood of success.

P3-67. What Academic Medical Center Faculty Think about Interprofessional Education of Healthcare Professional Students: A Needs Assessment for Curriculum Development

- Eve Colson, Yale University, School of Medicine, New Haven, CT, USA
- Paula Schaeffer, Yale University, School of Medicine, New Haven, CT, USA
- Mary Warner, Boston University, Boston, MA, USA
- Jennifer Meyers, University of Pennsylvania, Perelman School of Medicine, Philadelphia, PA, USA

Submitted abstract:

**Background:** Interprofessional education (IPE) can improve healthcare professional collaboration, which in turn improves patient care. It can be difficult to implement curricula likely due in part to unaddressed and unrecognized barriers. To understand such barriers, Kern and colleagues recommend beginning curriculum development and implementation with a needs assessment. Through this needs assessment,
educators can define predisposing factors (attitudes and beliefs that help or hinder), enabling factors (environmental factors that help or hinder) and reinforcing factors (behaviors that help or hinder) that can be acknowledged and leveraged potentially improving the likelihood of curriculum success.

**Objective:** Believing that faculty buy-in is key to successful curriculum implementation, we designed a study to identify academic faculty perspectives about IPE as part of a needs assessment during the design and implementation of interprofessional curricula for healthcare professional students at Yale University and the University of Pennsylvania.

**Methods:** We chose a grounded theory, qualitative methods approach in order to understand the range of perspectives about interprofessional education. Using purposeful sampling, we recruited 30 faculty from the Yale University Schools of Medicine and Nursing, the Yale Physician Associate Program and from the Schools of Medicine and Nursing at the University of Pennsylvania. Each of the faculty was involved in teaching students and had administrative roles in education. One trained researcher at each institution conducted face-to-face, semi-structured interviews that were audio recorded and transcribed. An interview guide was created and adapted while analysis occurred simultaneously in an iterative fashion. Each transcript was reviewed by at least 2 researchers. Initial open codes were created with each transcript. Using the constant comparative method, all transcripts were then re-reviewed to further refine themes and codes. Data was managed in AtlasTi and collection ended when theoretical saturation was reached.

**Results:** Of the 30 faculty who participated, 12 (6 from medicine, 6 from nursing) were from the University of Pennsylvania and 18 (8 from medicine, 6 from nursing, 4 from PA program) were from Yale. Using the Kern framework we identified key predisposing factors (culture of the institutions), key enabling factors (forces and curriculum) and key reinforcing factors (interprofessional experiences). The table gives details and examples of each of the themes and subthemes.

**Conclusion:** A qualitative analysis of the beliefs of faculty members at two academic institutions around IPE uncovered a number of factors that will be important to address as we embark on curricular change. We plan to utilize and act upon the themes that we found by targeting the predisposing, enabling and reinforcing factors that help and hinder interprofessional curriculum development as we build and change our curricula.

P3-68. Collaborative Teams2: Team Faculty Development on Collaborative Healthcare Teams

- **Susan J. Wagner**, University of Toronto, Toronto, ON, Canada
- **Denyse Richardson**, University of Toronto / University Health Network, Toronto, ON, Canada
- **Molyn Leszcz**, Mount Sinai Hospital, Department of Psychiatry, Faculty of Medicine, Toronto, ON, Canada

**Submitted abstract:**

**Background:** Interprofessional collaboration has become critical to academic institutions and workplaces to advance team-based learning and practice. Skilled, knowledgeable interprofessional educators are required to prepare individuals and teams for collaborative practice; therefore, faculty development leaders are key to the success of these initiatives. The Educating Health Care Professionals for Interprofessional Care (ehpic) faculty development course, consisting of five modules, was developed at the University of Toronto in 2005 to address this need. The focus of this workshop will be on the newly revised Module 2: Collaborative Teams of this faculty development program. Participants
will be engaged in experiential team learning while learning about the design and methodology of this module.

**Objectives:** At the end of this workshop, participants will be able to:

1. Describe the value of utilizing a play within a play or lived experience approach to collaborative team faculty development;
2. Describe methods and techniques that enhance this approach and
3. Discuss how they might advance these principles in their own contexts.

**Methods:** Snowden’s theoretical framework will situate collaborative teams as complex entities. Then, an overarching conceptual framework for the session will guide participants through a series of activities that focus on narrative and experiential learning. Principles, challenges (including power and hierarchy), benefits and the value of reflection of collaborative teams will be illuminated as part of this parallel faculty development process. Important design and logistical considerations in utilizing collaborative teams to best facilitate learning will also be highlighted.

**Results and Implications:** This module of the ehpic course successfully educates participants in the theories, principles and practices key to developing strong interprofessional collaborative teams as evidenced by qualitative and quantitative participant evaluation data over eight years. This workshop will allow participants to achieve the learning objectives so that they may develop faculty leadership programs in their own contexts.

**Author Biographies**

Susan J. Wagner, B.Sc. (SPA), M.Sc.(CD), Reg. CASLPO, S-LP(C) is the Senior Coordinator of Clinical Education and Director of Continuing Education, Department of Speech-Language Pathology, Faculty of Medicine, University of Toronto. As the inaugural Faculty Lead – Curriculum at the Centre for IPE she led the development and implementation of a requisite IPE curriculum. This involved creation and integration of core competencies, learning activities, points for interprofessional education system (PIPEs), assessment, evaluation and faculty leadership. An IPE student award is named in her honour.

Denyse Richardson, M.D., F.R.C.P.C., M.Ed.is an Associate Professor in the Division of Physiatry, Department of Medicine, Faculty of Medicine, University of Toronto (UT) and Clinician Educator with the Royal College of Physicians and Surgeons of Canada. Her involvement in education spans the continuum of health professions education, both locally and nationally through the National Specialty Society and the Royal College. Her educational research interests are in competency-based medical education, faculty development, lifelong learning and interprofessional care and education.

Molyn Leszcz, M.D., F.R.C.P.C. is the Psychiatrist-in-Chief at Mount Sinai Hospital and Professor and Vice Chair, Clinical in the Department of Psychiatry, Faculty of Medicine, University of Toronto. He is a recognized expert and teaches on group process internationally and on collaborative teams theory and principles in interprofessional education. He teaches in the UT Educating Health Professionals in Interprofessional Care (ehpic) IPE leadership course with Susan Wagner and Denyse Richardson.

**P3-69. Milestones and Entrustable Professional Activities: The Key to Practically Translating Competencies**

- **Susan J. Wagner**, University of Toronto, Toronto, ON, Canada
- **Scott Reeves**, University of California San Francisco, San Francisco, CA, USA
Submitted abstract:

**Background:** Competency-based education and practice are the foundation for interprofessional education (IPE) and collaboration (IPC). There has been a plethora of competencies developed in these areas recently, both at individual institutions and nationally, however, their potential has not clearly been realized educationally. They are often challenging to make meaningful to learners and to assess. Milestones and entrustable professional activities (EPAs) are new concepts and approaches from medical education that provide one way to envision and operationalize specific holistic learning across competencies to ensure that competency is attained. They are applicable to learning activities both within the classroom and the clinic, as well as to lifelong learning.

**Objectives:** This paper describes a research proposal focused on identifying what entrustable professional activities (EPAs) are appropriate for the effective assessment of IPE learning activities. Participants will be able to:
- Describe milestones and EPAs
- Describe how they are applicable to IPE and IPC competencies
- Describe a research project that will identify EPAs for IPE

**Methods:** This presentation will define and describe milestones and EPAs, consider their application to IPE and outline a research proposal to develop these in IPE. A sequential mixed methods approach will be presented including a first phase quantitative modified Delphi and a second qualitative focus group phase. The EPAs will be informed by identified milestones and competencies in the University of Toronto IPE competency framework that serves as the model.

**Results:** It is expected that key EPAs will be able to be identified as appropriate for the effective assessment of IPE learning activities.

**Implications:** The creation of milestones and EPAs for IPE and IPC competencies will ensure meaningfulness and the alignment of actual learning with assessment. This is critical to functionally utilize and maximize the value of competencies and advance the fields of education and IPE.

**Author Biographies**

Susan J. Wagner, B.Sc. (SPA), M.Sc. (CD), Reg. CASLPO, S-LP(C) is the Senior Coordinator of Clinical Education and Director of Continuing Education, Department of Speech-Language Pathology, Faculty of Medicine, University of Toronto. As the inaugural Faculty Lead – Curriculum at the Centre for IPE she led the development and implementation of a requisite IPE curriculum. This involved creation and integration of core competencies, learning activities, points for interprofessional education system (PIPEs), assessment, evaluation and faculty leadership. An IPE student award is named in her honour.

Scott Reeves, Ph.D. is the Editor-in-Chief, Journal of Interprofessional Care. Trained in the UK, he is a social scientist who has been undertaking health professions education and health services research. Over the past 20 years he has worked to develop conceptual, empirical and theoretical knowledge to inform interprofessional activities, and has published extensively in the interprofessional field.

**P3-70. Teaching Global Health Ethics Using Simulation: An Interprofessional Curriculum**
- **Tea Logar**, University of California San Francisco, San Francisco, CA, USA
Submitted abstract:
As interest in global health among students in the health professions continues to grow, we are in increasing need of adequate pre-departure training in ethical behavior while working in resource-limited settings. Recent literature shows that trainees often report having felt unprepared for ethical dilemmas they encountered during global-health fieldwork. The majority of the dilemmas stemmed from cultural and professional differences, limited resources at host institutions, and a frequent expectation that trainees perform beyond their scope of practice.
To address this problem, we designed an experiential, interprofessional global-health ethics curriculum, centered around four simulation scenarios. The aim of the simulations and subsequent debriefings is to prepare students to recognize and resolve ethical dilemmas they are likely to encounter during global-health electives. The scenarios are based on data extracted from relevant literature and three expert focus groups.

We have recently piloted the simulation curriculum with a cohort (N=27) of GME trainees from multiple disciplines (medicine, nursing, pharmacy, dentistry, and the graduate division) in order to test and refine the curriculum. All the participants completed pre- and post-test evaluations which assessed the six ethical areas/issues that were identified as crucial by focus groups and literature. Specifically, the evaluations assessed the impact of the simulation exercises on participants’ exposure to these ethical issues, the ability to strategize and deal with them, and the ability to identify a mentor to discuss them with. The results showed a significant increase in exposure to ethical issues after the participation in simulations, as well as a noticeably increased ability to develop strategies to deal with such issues. These preliminary results show that our simulation exercises accomplish the main objectives of the curriculum, which are to expose interprofessional trainees to various ethical dilemmas, reflect on alternative courses of action, and seek out mentors to guide them in decision making.

P3-71. Faculty Perceptions about Interprofessional Education (IPE) Facilitation Skills

- **Cynthia Beel-Bates**, Grand Valley State University, Kirkhof College of Nursing, Grand Rapids, MI, USA
- **Jeanne Smith**, Grand Rapids Medical Education Partners, Grand Rapids, MI, USA
- **Tracy Christopherson**, Elsevier Clinical Solutions, Grand Rapids, MI, USA

Submitted abstract:
**Background:** In the Team-Based Competencies: Building a Shared Foundation for Education and Clinical Practice Report (2011), a key restraining factor related to IPE was faculty inability to act as role models for interprofessional practice because they lack the knowledge, skills or experience required to be effective facilitators of IPE. Interprofessional education is defined as “students of two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes (WHO, 2010)”’. Faculty who teach from their own professional perspective, often use a multi-professional approach with students learning with each other but not from and about each other. This approach to teaching IPE is ineffective.

**Methodology:** A faculty development program was implemented using blended/hybrid, spaced, social media and clinical team-based practice learning methodologies. Banfield and Lackie’s (2009) IPE
Performance-based Competencies for Facilitation model, Kolb’s Learning Theory, and the Clinical Practice Model (CPM) Framework provided the structure for the program design. A modified version of the Interprofessional Facilitation Scale (Sargeant, Hill & Breau, 2010) was used to measure faculty perceptions of facilitation skills prior to participation in the program and following completion and teaching an IPE course.

**Results:** Eleven faculty from three professions completed the pre-survey; nine completed the post survey (82%). The survey included 18 questions; perceptions changed on all items ranging from 11% to 66%. On the question about appropriate facilitator skills to keep discussion topics on track, 66% of faculty increased their perception of their own skill.

**Implications:** Faculty perceptions related to their skill and ability to facilitate IPE can be impacted through participation in development programs and teaching IPE courses.

**Objectives:**
1. Describe methods that can be utilized to achieve IPE facilitation competencies
2. Discuss how the Interprofessional Facilitation Scale can be utilized to evaluate IPE facilitation competencies

**Author Biographies**

Tracy Christopherson, MS, BAS, RRT is the Director of Interprofessional Education and Practice for Elsevier Clinical Solutions. She has been a leader in creating interprofessional practice environments for over 20 years. Her experience comes from coaching and mentoring numerous organizations across the United States and Canada in advancing interprofessional integration and implementing an integrated clinical practice framework to strengthen practice at the point-of-care. She is passionate about bridging the gap between interprofessional education and practice.

Cynthia Beel-Bates, PhD, RN, is an associate professor of nursing at Grand Valley State University. Her nursing career has included acute care, community health, program development, nursing home administration, dementia care, hospice, research, and education. For the past 4 years, she has championed interprofessional education at GVSU; creating, implementing, and evaluating faculty development for the facilitation of IPE and facilitating IPE curricular development in undergraduate and graduate health professions programs.

Jeanne Smith, M.Ed, BS, BA, Educator and Content Developer at Grand Rapids Medical Educational Partners (GRMEP), is primarily responsible for needs analysis, design, development, authoring and evaluation of high-quality and cross-functional learning programs, curricula and instructional materials for residency/fellowship and faculty development programs. Her research, education and faculty support roles have focused on integrating instructional technologies, simulation and interprofessional education (IPE) into the health professions curricula.

**P3-72. A Dialogal Investigation of Becoming an IPE Facilitator**

- **Joan Borst**, Grand Valley State University, Grand Rapids, MI, USA
- **Courtney Karasinski**, Grand Valley State University, College of Health Professions, Grand Rapids, MI, USA
- **Russell Wallsteadt**, Grand Valley State University, Grand Rapids, MI, USA
• Cynthia Beel-Bates, Grand Valley State University, Kirkhof College of Nursing, Grand Rapids, MI, USA

Submitted abstract:
Background: Faculty who teach interprofessionally have few models. They are familiar with education, socialization, and practice within their own professions. Five faculty from different health professions participated in a pilot faculty development program to facilitate interprofessional education (IPE), came together to co-teach the first IPE course at a Midwestern university, and then collaboratively reflected on this transformative experience. A number of administrators are committed to faculty development in IPE methods to ensure our students receive a consistently effective IPE experience.

Objectives: Participants will:
1. Describe the benefits and long-range potential for collaborative relationship development in research and teaching.
2. Recognize the relationship between profound collaboration and discovery of one’s authentic self.
3. Acknowledge the value of reflective examination to developing as mature interprofessional facilitators.

Methods: The dialogal process, a phenomenological method, includes dialogue on three levels; preliminary, transitional, and fundamental. This process, an acceptable educational research method, creates a sense of understanding about a given phenomena. Five faculty committed to this process with approval from the university Human Research Review Committee. Twelve hours of videorecorded pilot sessions were transcribed for analysis. The rigor of critical self and group reflection is substantiated through the three levels of dialogue that move from sharing and exploration to collaborative understanding. Researchers’ thematic analysis of the transcribed data identified emergent themes.

Results: The faculty discovered that their continuing transformation was reflected in seven emergent themes, which included our function as a “team”, our “development as skilled facilitators”, our “process” and “behavior”, our “emotions”, and our “client-centeredness”. Our critical reflection together has helped us to see ourselves as a unique and evolving team with relationships that expand beyond the classroom, and have given us new skills to apply within our own professional curricula.

Implications: Critical reflection is a key component of development of interprofessional facilitation.

Author Biographies
Cynthia Graczynski EdD, OTRL is an Associate Professor and Chair of the Occupational Therapy Department at Grand Valley State University. She has been active in the profession for 40 years, 25 of them in teaching occupational therapy. Her background is in mental health occupational therapy where she worked with several different professions. She is committed to interprofessional education as a means to help clients achieve successful, satisfactory participation in their life roles and activities.

Joan Borst, Ph.D., LMSW is an Associate Professor of Social Work at Grand Valley State University. She has taught in the area of social work and health care for 15 years. Prior to teaching she worked in many health care settings, working closely with a variety of health professions to ensure quality patient-centered care. She is convinced about the necessity of interprofessional practice and has been instrumental in the addition of interprofessional education to the social work curriculum.
Cynthia Karasinski, Ph.D., CCC-SLP is an Assistant Professor of Communication Sciences and Disorders at Grand Valley State University. Prior to pursuing her terminal degree, she served as a speech-language pathologist in educational and medical settings. As a speech-language pathologist, she collaborated with professionals from a variety of disciplines to ensure optimal outcomes for her patients and students. She is committed to ensuring that her speech-language pathology students develop the skills necessary for interprofessional practice.

P3-73. Developing a course in interprofessional education—A process view

- **Cynthia Beel-Bates**, Grand Valley State University, Kirkhof College of Nursing, Grand Rapids, MI, USA
- **Courtney Karasinski**, Grand Valley State University, College of Health Professions, Grand Rapids, MI, USA
- **Joan Borst**, Grand Valley State University, Grand Rapids, MI, USA
- **Elaine VanDoren**, Grand Valley State University, Grand Rapids, MI, USA

Submitted abstract:

**Background:** The reality of our complex health care work environment requires an interprofessional approach to client care. This is reflected in care standards for clinical organization accreditation and in educational standards. GVSU faculty from Kirkhof College of Nursing, the College of Health Professions and the School of Social Work have developed a course with shared leadership that is designed to developed the knowledge, skills and attitudes for team based health care.

**Objective:** Participant will be able to provide an overview of the process that was required to make the dream of a sustainable mandatory, interprofessional health professions course a reality.

**Methods:** The evolution from strategic plan to the final course will be outlined and described. Complexities related to systems, partnerships and personalities will be explored. Two significant frameworks, including the Interprofessional Collaboration Assessment Rubric (ICAR) (Curran et al, 2011) and the Interprofessional Education Collaborative competencies (2011) greatly influenced the design of this course. Their influence will be explicated.

**Results:** Recommendations for designing a sustainable, effective course include five stages: Awakening, Exploring, Designing, Implementing and Refining and Visioning the Future

**Implications:** Shared leadership and faculty champions who are tenacious are required for the successful curricular launch of a sustainable IPE course.

**Author Biographies**

Cynthia Beel-Bates PhD, RN, FGSA is an associate professor of nursing at Grand Valley State University. Her nursing career has included acute care, community health, program development, nursing home administration, dementia care, hospice, research, and education. For the past 4 years, she has championed interprofessional education at GVSU; creating, implementing, and evaluating faculty development for the facilitation of IPE and facilitating IPE curricular development in undergraduate and graduate health professions programs.

Courtney Karasinski, Ph.D., CCC-SLP is an Assistant Professor of Communication Sciences and Disorders at Grand Valley State University. Prior to pursuing her terminal degree, she served as a speech-language
pathologist in educational and medical settings. As a speech-language pathologist, she collaborated with professionals from a variety of disciplines to ensure optimal outcomes for her patients and students. She is committed to ensuring that her speech-language pathology students develop the skills necessary for interprofessional practice.

Elaine VanDoren PhD, RN is an Associate Professor of Nursing and Associate Dean of Undergraduate Nursing Programs at Grand Valley State University. Her career has focused on RN to BSN education and more recently on the development of diversity in the student nursing population. As an administrator she advocates and supports innovative curricular development of interprofessional courses. She teaches in the interprofessional course providing multiple examples of interprofessional practice from her area of expertise; program evaluation.

P3-74. Identifying Needs and Opportunities for Faculty Development in Interprofessional Education

- Susan Johnson, Virginia Commonwealth University, School of Nursing, Richmond, VA, USA
- Sharon K. Lanning, Virginia Commonwealth University, Richmond, VA, USA
- Colleen Lynch, Virginia Commonwealth University, Richmond, VA, USA
- Emily Peron, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA

Submitted abstract:

**Background:** The Interprofessional Education Collaborative expert panel proposed identifying and developing competencies for interprofessional health care practice. Faculty understanding and skills needed to effectively guide IPE competencies often differ from those needed for discipline-specific learning.

**Objectives:** This presentation describes the process used to develop an assessment for identifying faculty development needs and opportunities in interprofessional education (IPE) at one institution.

**Methods:** A Faculty Learning Community (FLC) is a cross-disciplinary group of faculty who engage in an active, collaborative, and self-guided exploration of a significant teaching or research issue. During the 2013-2014 academic year nine faculty representing five health science professional schools convened as a FLC with a shared interest in IPE. The IPE-FLC participants, as an expert panel, aimed to (1) improve their understanding of IPE, (2) modify their teaching practice based on this improved understanding, and (3) promote improved teaching and learning across the institution by disseminating their research to a wider audience. Early in its discussions, the IPE-FLC identified minimal opportunities for faculty IPE development at their institution. Since faculty understanding of IPE is critical for successful implementation, the IPE-FLC sought to address this gap by developing a faculty IPE learning needs assessment. The process was initiated with a literature review that will inform development of a survey instrument.

**Results (expected):** Faculty IPE learning needs will be identified. This information will be used for developing interventions to support faculty development in knowledge, skills, abilities, and attitudes necessary for promoting student success with IPE.

**Implications:** The initial efforts of this project will positively impact the interprofessional teaching abilities of about 20 VCU faculty in their instruction of approximately 4,400 health professions students.
This process could also serve as a model for other universities interested in identifying faculty development needs and opportunities related to IPE.

**Author Biographies**

Deborah DiazGranados, Ph.D. is an assistant professor in the School of Medicine. Her PhD is in Industrial and Organizational Psychology and expertise includes teams, team leadership, collaboration and understanding the implications of diversity on team effectiveness. Debbie’s research has been published in major peer-reviewed journals as *Journal of Applied Psychology, Academic Medicine, Current Directions in Psychological Science* and *The Joint Commission Journal on Quality and Patient Safety.*

Sharon Lanning, DDS is an associate professor in the School of Dentistry. Her professional interests include the clinical practice and teaching of periodontics, curriculum design and development. Sharon has held leadership positions within the American Dental Education Association. Her research has been published in peer-reviewed journals such as the *Journal of Dental Education, Journal of Periodontology,* and *Patient Education and Counseling.*

Emily P. Peron, PharmD, MS, is an assistant professor in the VCU School of Pharmacy. She works with seniors in the community through the VCU Health System House Calls program and Bremo Pharmacy, an independent community pharmacy in the Richmond area. Dr. Peron is also on the Board of Directors for two Richmond-based international outreach organizations (Humanitarian Outreach Medical Brigade Relief Effort and Richmond Global Health Alliance), both of which coordinate interprofessional medical campaigns.

**P3-75. Richmond Global Health Alliance: Utilizing Diverse Professionals and Students in Building a Successful Global Health Project in Peru**

- **Emily Peron**, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- **Sean Byrne**, Hancock, Daniel, Johnson & Nagle, P. C., Richmond, VA, USA
- **Sean McKenna**, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- **Ranya Abi-Falah**, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA

Submitted abstract:

**Background:** With goals of improving the health of an underserved community and enhancing the education of health professions students, an interprofessional team travels annually to Pampas Grande, Peru.

**Methods:** Our campaign aims to support and provide care to Pampas Grande residents while educating students through service learning. Multiple clinics are conducted, with the majority of patients encountered at the District Health Post. Because of distance and other barriers affecting those in outlying towns, freestanding clinics are established and home visits are conducted. Pharmacy and dental professionals expand the services available in the medical clinic. Public health professionals work alongside clinicians, allows for impact outside the traditional clinic visit and resulting in enduring community health projects. A successful project focused on the aging population has been built by partnering physicians with community health workers. This project addresses joint pain, one of the most common complaints among older adults seen in clinic, through education about physical therapy exercises and regular home visits. Uniquely, the addition of lawyers enhances the campaign through use of their skill set in logistic support that grows the breadth of community engagement. Moreover,
involvement of professionals who are non-clinical providers allows for further efforts in social justice initiatives, infrastructure building, and school involvement.

**Implications:** Building an interprofessional team has afforded enhancements in the quality of care and breadth of services offered to Pampas Grande residents in recent years. In the medical clinic, we have expanded services offered by including physicians, dentists, and pharmacists. By involving public health professionals and lawyers, we have endowed broader community engagement. Moreover, this multi-professional collaboration enhances the service learning experiences of accompanying students by allowing them to observe the diverse skill sets employed by various professionals and subsequently the benefits of these skill sets working in concert toward a common health goal.

**Author Biographies**
Emily P. Peron, PharmD, MS, is assistant professor of geriatrics in the VCU School of Pharmacy. A board-certified pharmacotherapy specialist, Dr. Peron practices and teaches geriatric pharmacy in the VCU Health System House Calls program and at Bremo Pharmacy, an independent community pharmacy in the Richmond area. She also serves as director of international outreach programs for the VCU School of Pharmacy.

Sean O. McKenna, MD, is assistant professor of pediatrics in the VCU School of Medicine. A board-certified pediatrician, Dr. McKenna practices in the VCU Health System Division of General Pediatrics. He also works as an MD informaticist in the VCU Health System Office of Clinical Transformation and is the MD champion of the Medical-Legal Partnership Richmond, a project designed to link families with unmet legal needs with free legal advice and representation.

Sean P. Byrne, JD, is a health care attorney, licensed in Virginia and Tennessee, and specializing in medical malpractice defense. He represents physicians and hospitals in state and federal courts. He frequently provides health care risk management education and patient safety advice. He is an adjunct professor at the University of Richmond teaching undergraduate and law school courses. A focus of his teaching is the intersection between law and medicine and collaboration between the two disciplines.

**P3-76. Establishing a Turkish Interprofessional Education (TIPE) group and promote the innovative Interdisiplinary Learning (IPL) programmes at newly establish Turkish Universities.**

- **Sezer Domac**, World Health Organisation-International Expert (Turkey), Turkey
- **Ali Yildirim**, De Montfort University, Leicester, UK
- **Fatih Sobaci**, University of Leicester, Leicester, UK
- **Pinar Soydas**, University of Leicester, Leicester, UK
- **Turkan Ozkent**, University of Leicester, Leicester, UK

**Submitted abstract:**
TIPE to conduct a qualitative and quantitative research to explore how we can incorporate the IPE in Turkey. We wrote an IPE curriculum that will be culturally appropriate to the Turkish Universities.

At the moment Turkish Universities are being challenged to grow and modernise. The numbers are increasing and bringing new challenges between the Universities. Many established universities are ambitiously attracting students to raise their profiles and transform their educational systems to generate an internationally competitive workforce. IPE is the greatest solution to deliver the modernised
curriculum to enhance the collaboration and better outcomes for the people who receive health and social care.

IPE equips student’s ability and skills to prepare them for future modern practice. This is indeed the hallmark of IPE which would in addition bring modern teaching approaches e.g. the use of problem based learning to social and health care faculties. The EIPEN community is well established to support Turkey in this new chapter. Turkish Universities are depended upon the establishment of small projects to build strong European alliances. In this way educational exchanges and new research can assure evidence–based IPE curriculum evolve within Turkey.

It was agreed that interprofessional competencies should be developed across health and social care faculties in line with the World Health Framework on IPE. The group aims to create a competency framework that is adapted from the CAIPE.

P3-77. Does a Portfolio of students reflections demonstrate learning towards obtaining interprofessional competence at pre-registration level?

- Sezer Domac, World Health Organisation-International Expert (Turkey), Turkey
- Elizabeth Anderson, University of Leicester, Leicester, UK
- Jenny Ford, De Montfort University, Leicester, UK

Submitted abstract:

Background: Within pre-registration interprofessional education (IPE) there is growing agreement regarding what should be assessed, but what is less clear is how this can be achieved.

Objectives: To address some of the difficulties our regional IPE curriculum adopted a personal reflective Portfolio asking students to write about their developing knowledge, skills and attitudes after each piece of IP learning (IPL). We report on a study to assess the content of students IPE Portfolios at the end of training.

Methods: A qualitative design was used to analyse a random samples of student work (medicine, speech and language therapy[S& LT] and social work [BA and MA]) was used. The written account was analysed using content analysis. A sub-set of students were interviewed and the audio-taped data was analysed using thematic analysis.

Results: All students were able to reflect on learning. Students found writing about new knowledge easier than skills and attitudes. Each student reflected from within their professional stance. There were many similarities relating to shared IPE experiences across the curriculum. The content outlines and confirms the local competence framework that students should develop from the local IPE curriculum. Differences related to professional values. The quality of reflective writing improved over time. Of the sub-set of interviews the students endorsed the portfolio as a good way to assess their progress. They offered solutions relating to aspects they did not like such as hand-in times. Students confirmed the assessment had prepared them for life-long reflections on their learning.

Implications: The study confirms the Portfolio as a useful and flexible mechanism for IPE assessment easily integrated within each professional body requirements. The study offers teachers insights on how to advance the use of a Portfolio for the assessment of IPE.

Author Biographies
Sezer Domac is a qualified social worker. He currently works a senior manager at Social Services (Local Authority) and recently obtained his PhD. He is a consultant to provide a variety of deliverable outcomes for the EU-funded projects ‘Promoting Services for People with Disabilities’ in collaboration with the WHO team in Turkey since October 2013. The project beneficiaries of this work have been the Ministry of Health and Ministry of Family and Social Policies.

Liz Anderson, from an early clinical career (nurse, midwife and health visitor) has led innovations in medical education and led the design of an IPE curriculum shared by three universities, in S. Midlands, UK. She is a National Teaching Fellow. She has served on several national boards for the enhancement of professional education (including CAIPE) and has published widely on IPE.

Jenny Ford worked as a speech and language therapist specialising in children with complex needs before joining De Montfort University to work in pre-registration speech and language therapy education. She has been a key member of the regional Strategic group developing IPE for pre-registration students. She is Operational IPE Lead in the faculty of Health and Life Sciences at De Montfort, a CAIPE Board member and one of the co-ordinators of the CAIPE Student Network.

Roger Smith is a Professor of Social Work at Durham University. He is a National Teaching Fellow. He is a member of Academy of Social Sciences, Economic and Social Research Council, Higher Education Funding Council for England.

P3-78. Interprofessional Education in the Classroom: Peer review as a quality improvement initiative

- Carrie Krekoski-De Palma, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- Lynda Eccott, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- Elsie Tan, University of British Columbia, School of Nursing, Vancouver, BC, Canada

Submitted abstract:
Description: There is paucity in the literature on the skills and strategies required for effective interprofessional teaching in the classroom, making the peer review of IPE educators a challenge to conduct. The presenters will inform the participants of one peer review of teaching process and facilitate participants in creating their own set of criteria and processes that can be utilized to improve the quality of interprofessional teaching in their own setting.

Rationale: Much of the literature on interprofessional learning has generally focused on structured educational programs, activities and elements of effective interprofessional education; however, there is paucity in the literature on the skills and strategies for effective interprofessional teaching in the classroom. The College of Health Disciplines (CHD) at the University of British Columbia delivers 15 Interprofessional Health and Human Service (IHHS) courses. We are currently leading an initiative to support an integrated quality improvement approach to interprofessional education (IPE) that will encourage best practices for teaching and curriculum development by developing a peer review process for these courses. The project was undertaken by a curriculum sub-committee and was initially informed by a review of interprofessional education literature and best practices for peer review. Themes from the literature around IPE were vetted through a modified Delphi survey approach. Judgments about what is important for effective interprofessional teaching and learning in the
classroom were collected from a panel of selected faculty, students and administrators, as the literature suggests that the most significant factor in determining the effectiveness of peer review is the acceptance of its users.

**Objectives:** By the end of this workshop participants will:
1. Explore the assumptions that may influence educators’ perceptions about what constitutes IPE;
2. Identify challenges and facilitators to developing and implementing a peer review program for IPE that is accepted by educators and responsive to different courses and student groups;
3. Become familiar with a lens and potential framework for peer review of IP teaching and learning; and
4. Discuss how educators can create more opportunities and a better environment for interprofessional learning and collaborative practice.

**Methodology:** The workshop will begin with a short presentation of the CHD peer review of IPE teaching program for the IHHS courses. We will discuss the development of the program, the materials that we utilize for the peer review process, and will share our challenges and lessons learned. The presentation will be followed by small and large group work to allow participants to consider a lens for interprofessional peer review of teaching in their own settings.

**Results:** This workshop will describe the creation of a peer review program and the development of an instrument to support peer review of IPE. The instrument assists educators and peer-reviewers to identify strengths, weaknesses and opportunities to improve the quality of interprofessional learning for students. By the end of this workshop, participants will have a framework from which they can create or augment their own peer review process in their own institution.

**Implications:** This workshop provides an opportunity for IPE educators and administrators to build on a quality improvement approach for interprofessional teaching and learning in the classroom.

**Author Biographies**
Carrie Krekoski, BDSc., MEd., Curriculum Coordinator of Interprofessional Education Curriculum, College of Health Disciplines and Sessional Instructor in the Faculty of Dentistry at the University of British Columbia. As a member of the UBC IPE Curriculum Committee and parent Curriculum Teaching and Effectiveness Committee in the Faculty of Dentistry, she has been involved in the promotion, development, implementation and evaluation of IPE at UBC since 2010.

Lynda Eccott, B.Sc., M.Sc., Senior Instructor, is the Director of Interprofessional Education Curriculum, College of Health Disciplines, and Coordinator of Interprofessional Curriculum, Faculty of Pharmaceutical Sciences at the University of British Columbia. She chairs the IPE Curriculum Committee and the IPE Peer Review of Teaching Subcommittee and has been involved with developing, implementing and evaluating IPE at UBC since 2007.

**P3-79. Student Led Community Service Learning (CSL) Initiatives: Building an infrastructure to support and sustain interprofessional learning and authentic community engagement**
- **Carrie Krekoski-De Palma,** University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada

**Submitted abstract:**
**Background:** The Community Health Initiative by University Students (CHIUS) is an interprofessional (IP), student-led health enterprise that responds to the needs of inner-city residents. The initiative started a decade ago by a few medical students and grew to 500+ interdisciplinary student volunteers who operated independently from the university. Recently, the health authority (HA) became increasingly concerned that student volunteers were acting outside the scope as HA volunteers without the appropriate screening, supervision and accountability mechanisms in place. In 2011, the HA announced that CHIUS activities were no longer permitted within any of its agencies or affiliated organizations.

**Objectives:** Recognizing value in student-led initiatives and CSL opportunities, the College of Health Disciplines accepted the task of assisting CHIUS in its restructuring and alignment with the University.

**Methodology:** The restructuring process aimed to develop closer links between the work of CHIUS, community needs and health professional (HP) programs. CHIUS adopted a complementary governance model, policies and processes that authentically engage community and recognize the critical role it plays in the co-educational process of student learning; support student leadership and innovation; align with University policy, regulations and procedures; comply with Regulatory requirements; engage HP programs as mentors and stakeholders; and facilitate interprofessional learning experiences where students from different disciplines have the opportunity to learn with, from, and about each other in response to community-centred goals.

**Results:** CHIUS provides an excellent forum for community-driven and student-led activities that align with the HP programs’ curriculum. CHIUS activities are focused on helping students acquire and practice skills related to working in IP teams, social responsibility, accountability, community engagement and health advocacy through student-led meaningful, relevant and respectful community service learning initiatives.

**Implications:** This presentation provides an opportunity to examine a feasible model for student-led CSL initiatives that could be adopted by educational institutions.

**Author Biographies**
Carrie Krekoski, BDSc., MEd., Curriculum Coordinator of Interprofessional Education Curriculum, College of Health Disciplines and Student Liaison for the Health Science Student Association and Community Health Initiative for University Students. As a member of the UBC IPE Curriculum Committee and parent Curriculum Teaching and Effectiveness Committee in the Faculty of Dentistry, she has been involved in the promotion, development, implementation and evaluation of IPE at UBC since 2010.

**P3-80. A Longitudinal Study of Students’ Perceptions of Health Profession Groups: Exploring the Impact of Interprofessional Education on Stereotypes**
- **Carolyn Giordano,** Thomas Jefferson University, Philadelphia, PA, USA
- **Barret Michalec,** University of Delaware, Newark, DE, USA
- **Sokha Koeuth,** Thomas Jefferson University, Philadelphia, PA, USA
- **Christine Arenson,** Thomas Jefferson University, Philadelphia, PA, USA
- **Elizabeth Speakman,** Thomas Jefferson University, Philadelphia, PA, USA

**Submitted abstract:**
Despite the increasing awareness and momentum of Interprofessional Education (IPE) and continued development and inclusion of IPE programs into the curriculum of various health professions, the
findings of previous research are somewhat mixed regarding the actual impact these programs have on dismantling or even stifling students’ negative stereotypes of health professions. Furthermore, past studies have not fully unpacked these perceptions, nor have they examined how these perceptions (and their potential changes) may contrast with how students view their own future profession. A total of 638 students from six different health profession training programs completed the Student Stereotypes Rating Questionnaire (SSRQ) assessing their perceptions/stereotypes of their own and other health professions at the beginning and end of a two-year IPE program. Featuring a more extended IPE program compared to previous research, this specific study adds considerably to the current literature by examining to what extent experiences within a 2-year IPE program impact students’ stereotypes of their own and other health professions, as well as the complexity of those perceptions and their potential shifts - spotlighting their possible durable and/or malleable nature. Findings from the Time 1 data (gathered at the beginning of the IPE program) are featured in a recent issue of the Journal of Allied Health (2013, 42(4): 202-213). We are currently analyzing Time 2 data (gathered at the end of the IPE program). We are certain that we will have all analyses completed well before the Conference.

Author Biographies
Carolyn Giordano, PhD, is the Director of the Office of Institutional Research at Thomas Jefferson University and is responsible for providing student and faculty outcome data and has presented and published in the area of interprofessional education at varies national and international conferences.

Barret Michalec, PhD, is an Assistant Professor in the Department of Sociology at the University of Delaware. He also serves as the Assistant Director of Health Research within the Center for Drug & Alcohol Studies (at UD), and is an adjunct Research Assistant Professor of Community & Family Medicine at Jefferson Medical College. His work focuses on socialization and professionalization processes and mechanisms within health professions education.

Sokha Koeuth, MPH, earned a Bachelor’s degree in Business Administration at Temple University and a Master’s in Public Health from the University of the Sciences in Philadelphia. Currently, she is an Education Program Administrator at Jefferson Interprofessional Education Center (JCYPE). She manages the Health Mentors Program, Dispo Dilemma, Teach back and other interprofessional initiatives. Her concentration is program planning, implementation and evaluation in efforts to improve patient-centered care.

Christine Arenson, MD, received her medical degree from Jefferson Medical College and is board certified in Family Medicine and Geriatric Medicine. She is Professor and Interim Chair of the Department of Family and Community Medicine. She is the co-director of the Jefferson InterProfessional Education Center. Her work focuses on implementing and evaluating interprofessional education and collaborative practice models. She led development of the Jefferson Health Mentors Program, and has published and spoken widely on these topics.

Elizabeth Speakman, EdD, RN, ANEF, is Co-Director of the Jefferson Interprofessional Education Center and Associate Professor in Nursing at Thomas Jefferson University. Dr Speakman is an Academy of Nursing Education Fellow, and a Robert Wood Johnson Foundation Executive Nurse Fellow. Dr. Speakman has been a nurse educator for 28 years with over 75 national presentations. Dr. Speakman received a BS in Nursing from Wagner College, and her Masters and Doctorate in Education from Columbia University.
P3-81. The Maryland Eastern Shore Collaboration for Interprofessional Education (ESCIPE) Experience

- **Hoai-An Truong**, University of Maryland Eastern Shore (UMES), School of Pharmacy, Princess Anne, MD, USA
- **Katherine Hinderer**, Salisbury University, Department of Nursing, Salisbury, MD, USA
- **Adriana Guerra**, Salisbury University, Respiratory Therapy Program, Salisbury, MD, USA

Submitted abstract:

**Background:** The Centre for the Advancement of Interprofessional Education, the Institute of Medicine, and the World Health Organization highlight the importance of interprofessional education (IPE) in preparation of health professionals for a practice-ready healthcare workforce. Additionally, professional academic accrediting bodies are calling for the inclusion of IPE within respective curricula.

**Objective:** Describe the creation/formation and impact of an inter-institutional interprofessional team comprised of six healthcare disciplines from two different academic institutions.

**Methods:** In September 2012, faculty from Nursing, Pharmacy, Physical Therapy, Physician Assistant, Rehabilitation, and Respiratory Therapy from two institutions on the Eastern Shore of Maryland, a geographically isolated area, met to create an inter-institutional interprofessional team to foster educational redesign in preparation for a collaboration ready healthcare workforce. Members attended the Interprofessional Education Collaborative and met monthly, alternating locations between the two institutions. The team worked to develop and implement the mission, vision, objectives, and priorities of the initiative.

**Results:** Over a one-year period, the team adopted a mission and vision statement, mapped curricula according to the *Core Competencies for Interprofessional Collaborative Practice* (Interprofessional Education Collaborative Expert Panel, 2011), and identified key priorities for IPE. Additionally, the team conducted a faculty IPE needs assessment, implemented a faculty speakers’ bureau, coordinated IPE students’ seminars, developed an IPE course, and started building an inter-institutional website. Challenges included bringing together faculty from different professions and institutions that have not historically worked well together, clarifying roles and responsibilities, and understanding how the professions integrate. Despite challenges, the team was able to identify common ground, work productively together, and have strong administrative support.

**Implications:** The team has served as a catalyst for future faculty and student collaboration in IPE to ensure better health outcomes for populations on the Maryland Eastern Shore. Implementation of similar initiatives at other institutions will be discussed.

**Author Biographies**

Hoai-An Truong, PharmD, MPH is Associate Professor and Assistant Dean for Professional Affairs at the University of Maryland Eastern Shore School of Pharmacy. Dr. Truong teaches and provides medication management for underserved patients in interprofessional collaborative clinics. He published fifteen peer-reviewed journal articles and book chapters and presented at many state, national, and international meetings. Dr. Truong currently holds state and national leadership positions and has received both pharmacy and public health awards and recognitions.
Katherine Hinderer, Ph.D., RN, CCRN is currently an Assistant Professor of Nursing at Salisbury University in Salisbury, Maryland. She received her Ph.D. in Nursing from the University of Maryland, Baltimore. Her Ph.D. specialty is in end-of-life decision-making. Areas of clinical expertise include adult critical care and adult health nursing. Current research interests include interprofessional education, end-of-life decision-making, and advanced care planning. She has presented both nationally and internationally on interprofessional nursing education and end-of-life issues.

Adriana Guerra, MPH, RRT is a Clinical Assistant Professor and Program Coordinator for Salisbury University’s Respiratory Therapy Program at the Universities at Shady Grove in Rockville, Maryland. She holds a Master of Public Health in Health Policy and Management from Texas A&M University Health Science Center’s School of Rural Public Health in College Station, Texas. She has been a Registered Respiratory Therapist for 13 years with an interest in adult critical care and public health.

P3-82. An Interprofessional Approach and Multiple Academic-Community Partnerships for Providing Health Education and Improving Medication Safety in Underserved Clinics

- Hoai-An Truong, University of Maryland Eastern Shore (UMES), School of Pharmacy, Princess Anne, MD, USA
- Rosemary Botchway, Primary Care Coalition of Montgomery County, Silver Spring, MD, USA
- Diem-Thanh (Tanya) Dang, Primary Care Coalition of Montgomery County, Silver Spring, MD, USA

Submitted abstract:

**Background:** The Institute of Medicine (IOM) reported that at least 1.5 million preventable adverse drug events (ADEs) occur annually. A Harris Interactive Healthcare poll showed that one-third of Americans are non-adherence to their medication regimen. ADEs and non-adherence are among the top medication-related problems leading to poor health outcomes. The IOM also stated that it is essential for healthcare professionals to collaborate and provide patient-centered care.

**Objective:** Describe an interprofessional approach for and impact of medication management and health education through multiple academic-community partnerships to improve adherence, safety, and health outcomes for underserved populations.

**Methods:** Since October 2009, the Primary Care Coalition of Montgomery County in Maryland has led a multiple partnership initiative with an interprofessional approach to integrate medication management and health education into several underserved clinics. Academic or community partners have distinctive roles, while the interprofessional collaborative model incorporates elements of the Health Belief Model and principles of motivational interviewing to empower patients for self-management of chronic conditions. The team provides patient-centered care and health education for a diverse patient population.

**Results:** Over a four-year period, 246 patients were seen, 2099 medications were reviewed, averaging 8.5 medications per patient who has an average of 4.8 chronic conditions. Additionally, 689 medication-related problems (MRPs) were identified, averaging about 2.8 MRPs per patient visit. Top five medication-related problems identified and resolved were subtherapeutic dose (35%), non-adherence (20%), untreated indication (17%), ineffective treatment regimen (13%), and adverse drug reactions (10%). Challenges include provider’s initial concerns and lack of awareness regarding team member’s roles and language barriers. Despite limitations, the team was recognized for best collaborative partnerships and life-saving patient safety award.
**Implications:** Interprofessional approach to medication management and health education in underserved clinics optimize medication use and patient safety. Similar interprofessional collaboration can be implemented at other clinics through multiple academic-community partnerships.

**Author Biographies**
Rosemary Botchway, Director, Medicine Access Programs, Primary Care Coalition, Montgomery County MD currently leads an award winning team in the HRSA Patient Safety and Clinical Pharmacy Services Collaborative (PSPC) improving quality of health care by integrating evidence-based clinical pharmacy services into the care and management of complex patients; an inaugural member of the CMS Innovation Advisors Program, where healthcare leaders test new models of care delivery to improve care, and lower costs through improvement.

Diem-Thanh (Tanya) Dang is Co-lead of the Primary Care Coalition, Montgomery County, MD HRSA Patient Safety and Clinical Pharmacy Services Collaborative (PSPC) team. Tanya coordinates team activities and meetings, analyzes and reports patient outcomes data, and provides consultation for new teams in the quality improvement organizations. Under her co-leadership, the team received national awards from the American Diabetes Association and PSPC Life-saving Patient Safety category. She also received the Key for the Team Success recognition.

Hoai-An Truong, PharmD, MPH is Associate Professor and Assistant Dean for Professional Affairs at the University of Maryland Eastern Shore School of Pharmacy. Dr. Truong teaches and provides medication management for underserved patients in interprofessional collaborative clinics. He published fifteen peer-reviewed journal articles and book chapters and presented at many state, national, and international meetings. Dr. Truong currently holds state and national leadership positions and has received both pharmacy and public health awards and recognitions.

P3-83. A realist evaluation of IPL: lessons learnt for moving forward

- **Jennifer Newton**, Monash University, Clayton, Victoria, Australia
- **Brett Williams**, Monash University, Clayton, Victoria, Australia
- **Fiona Kent**, Monash University, Clayton, Victoria, Australia
- **Michelle Leech**, Monash University, Clayton, Victoria, Australia

Submitted abstract:
**Background:** In recent years several key reports within the interprofessional education (IPE) and interprofessional learning (IPL) literature have identified the need to develop scale and consistency for embedding and sustaining IPE in health professional education (Yassine et al., 2011). There had been no systematic and collective evaluation, in terms of overall student outcomes and graduate attributes, of the various interventions and initiatives in IPL across our Faculty. Neither had there been an overall evaluation of the sustainability of these projects or exploration of these initiatives into on-going health professional curricula development, both vertically and horizontally, across a large Faculty of Medicine, Nursing and Health Sciences, in Australia.

**Objectives:** This project aimed to undertake a scoping exercise of IPE and IPL activities, from 2008-2013, across the Faculty. In doing so it sought to determine the impact of IPE interventions and the effect on student learning outcomes.
**Methods:** A realist evaluation approach was used drawing upon both quantitative and qualitative data collection. This included an on-line survey of Faculty health professional practice-based academics’ (n=84) attitudes to interprofessional education practices to determine readiness for engagement. Individual audio-recorded interviews with clinical health practitioners (n = 25) engaged in the University’s IPL projects. An audit tool premised in context, mechanism and outcomes was developed by the project team to audit IPL projects’ outcomes over the last 5 years. Data analysis will entail the use of SPSS V22 for the survey. Individual interviews will be transcribed and thematically analysed and the quantitative and qualitative data will be synthesised.

**Results:** At the time of abstract submission, data collection is in the process with analysis to be completed in early 2014.

**Implications:** With national and an international impetus to embed IPE/ IPL into health professional education, this evaluation will offer a framework for moving forward.

**Author Biographies**
Jennifer is an Associate Professor in the School of Nursing and Midwifery, Faculty of Medicine, Nursing and Health Sciences Monash University. Jenny is a highly experienced qualitative researcher with particular interest in: ethnomethodology, phenomenology, descriptive research, and action research. Her research experience and supervision of projects spans a diverse range across workplace learning, interprofessional learning, reflective practice and practice development. She is on the editorial board of the international multidisciplinary journal, Reflective Practice.

**P3-84. Walking the talk: coming together for IPE**

- **Jennifer Newton**, Monash University, Clayton, Victoria, Australia
- **Brett Williams**, Monash University, Clayton, Victoria, Australia
- **Fiona Kent**, Monash University, Clayton, Victoria, Australia
- **Mollie Burley**, Monash University, Latrobe Community Health Services, Clayton, Victoria, Australia

**Submitted abstract:**
Kobe, Japan 2012 found several delegates at the ATBH VI conference commenting to each other, “I didn’t know you were coming to this conference!” This group of delegates all worked at the same university across a range of disciplines and campuses. Each of us had been engaged in IPE/IPL projects within our respective schools and departments but inadvertently with little dialogue with each other. Forward thinking on the behalf of one member, who initiated an informal meeting of the team from Monash University whilst we were at Kobe, led us to commence the walk and talk about how could IPE move forward within our faculty.

This reflective presentation will share our journey from Kobe to 2014. Inspired and motivated we met with the Deputy Dean of Education and his associate and articulated the need for the faculty to have a more strategic framework for embedding IPE and IPL into our health professional practice based disciplines. Considered to be one of the leading universities in our country, we challenged that we were lagging behind in having an integrated approach to IPE/IPL. Supported by the Deputy Dean, a faculty forum day was organised by the ‘Kobe delegates’ and held in early 2013. Coming together is not always easy; teaching, administrative commitments and clinical responsibilities can impact on moving forward. It is possible though with determination to sow the seeds and create a starting point.
**Author Biographies**
Jennifer is an Associate Professor in the School of Nursing and Midwifery, Faculty of Medicine, Nursing and Health Sciences Monash University. Jenny is a highly experienced qualitative researcher with particular interest in: ethnomethodology, phenomenology, descriptive research, and action research. Her research experience and supervision of projects spans a diverse range across workplace learning, interprofessional learning, reflective practice and practice development. She is on the editorial board of the international multidisciplinary journal, Reflective Practice.

**P3-85. A multi-institutional analysis of Australian undergraduate paramedic students’ attitudes towards interprofessional learning and cooperation: A two-year study**

- **Brett Williams**, Monash University, Clayton, Victoria, Australia

**Submitted abstract:**

**Background:** Healthcare systems are evolving to feature interprofessional practice more prominently. The development of successful interprofessional practice is best achieved through interprofessional learning. Given that many paramedic programs take a uniprofessional educational approach to their undergraduate courses, questions must be raised as to whether students are being adequately prepared for the interprofessional healthcare workplace.

**Objectives:** The objective of this study was to assess the attitudes of undergraduate paramedic students from eight Australian universities towards interprofessional learning and cooperation over a two year period.

**Methods:** This cross-sectional study used convenience sampling of first, second and third year undergraduate paramedic students from eight Australian universities using two established instruments i) Interdisciplinary Education Perception Scale (IEPS) and ii) Readiness for Interprofessional Learning Scale (RIPLS).

**Results:** A total of 1,264 students participated (n=303 in 2011 and n=961 in 2012) in this study, consistent with a 43% response rate. Surveyed students were predominantly first year n=506 (40.03%), female n= 748 (59.2%) and undertaking single paramedic degrees n= 948 (75.0%). The RIPLS subscale mean scores were: Teamwork and Collaboration 36.69 (SD=6.79), Negative Professional Image 6.75 (SD=2.94), Positive Professional Image 15.18 (SD=3.20) and Subscale Four: Roles and Responsibilities 7.26 (SD=2.53). The IEPS mean scores were: Competence and Autonomy 23.63 (SD=3.86), Perceived need for cooperation 9.65 (SD=1.65) and Perception of actual cooperation 23.78 (SD=4.22). Statistical significant differences were found between universities and each subscale at p<0.0001.

**Implications:** The current study provides the first nationwide normative data for paramedic students for the IEPS and RIPLS within Australia. Initial findings tend to suggest that paramedic undergraduates are reasonably positive about the concept of interprofessional learning and their ability to work as part of a collaborative healthcare team.

**P3-86. Social Media and Interprofessional Education: A Way to Connect Students Across Professions?**

- **Adam Reid**, Memorial University of Newfoundland, Centre for Collaborative Health Professional Education, St. John’s, NL, Canada
• **Olga Heath**, Memorial University of Newfoundland, Centre for Collaborative Health Professional Education, St. John’s, NL, Canada

Submitted abstract:

**Background:** Health/social professional educational institutions recognize the potential for using social media as a tool for enhancing curriculum. Given that social media facilitates connections and knowledge sharing between individuals, it has potential for interprofessional education (IPE). The few studies published reinforced the initial optimism for social media’s utility as a learning tool, but there is little consensus on how to utilize these applications.

**Objectives:** The current study assessed how often students used three common social media sites - Facebook, Twitter and LinkedIn – and asked about attitudes toward using social media for connecting with students within their own and to those in other professions.

**Methods:** This study used a simultaneous mixed methods design. Paper surveys were distributed to 749 students in five health/social care faculties/schools from September 2011 to March 2012. Respondents indicated how often they used each social networking site on a five-point scale ranging from “Never” to “2+ Times/Day”, and then described their attitudes towards using social networking for connecting with peers in their own faculty and those in other faculties.

**Results:** Over 89% of all students indicated visiting Facebook at least once per day. Conversely, 82.4% and 98.0% of students reported never using Twitter and LinkedIn, respectively. Overall, students were significantly more likely to describe social media as helpful for connecting with students in their own faculty (81.3%) than in other faculties (68.1%). This effect was greatest among social work students and least among nursing students. Students raised concerns about privacy, separating personal and academic worlds, and faculty members viewing online interactions.

**Implications:** While students use Facebook regularly, they have significant concerns about using it for academic purposes particularly outside of their own discipline. We need to better understand student concerns about using social media for interprofessional education before incorporating it into curricula.

**Author Biographies**

Dr. Heath PhD, a Registered Psychologist, is the Director of the Centre for Collaborative Health Professional Education at Memorial University in Newfoundland Canada. Her research interests include health care team functioning, continuing interprofessional education and collaborative chronic disease management particularly in mental health. Dr. Heath worked as a clinical psychologist and a manager within the health care system for more than 20 years before moving to the university to work in interprofessional education.

Adam Reid, MASP is the research coordinator at Memorial University’s Centre for Collaborative Health Professional Education, where he designs and implements evaluation and research components of interprofessional education programs. He holds a Masters of Applied Social Psychology from Memorial University in Newfoundland, Canada and a Bachelor’s of Arts (Honors, Psychology) from Mount Allison.

**P3-87. Interprofessional Skills Training: An innovative approach to building collaborative skills through interprofessional education in pre-licensure health/social care students**

• **Carolyn Sturge Sparkes**, Memorial University of Newfoundland, Faculty of Medicine, St. John’s, NL, Canada
Caroline Porr, Memorial University of Newfoundland, School of Nursing, St. John’s, NL, Canada
Adam Reid, Memorial University of Newfoundland, Centre for Collaborative Health Professional Education, St. John’s, NL, Canada
Erin Davis, Memorial University of Newfoundland, School of Pharmacy, St. John’s, NL, Canada

Submitted abstract:
**Background:** Interprofessional collaboration is increasingly recognized as a critical component of pre-licensure curricula for health and social care professional students. Students find interprofessional education (IPE) most valuable when it involves opportunities for face-to-face small-group discussion with peers from other professional schools. In addition, development and growth of interprofessional collaborative skills is enhanced when students are provided opportunities for self-reflection. In an effort to ensure collaboration-ready health/social care students, Memorial University introduced the Interprofessional Skills Training (IPST) program in September, 2013, combining multiple face-to-face small-group discussions with reflective journaling. We describe the innovative IPST curriculum and present preliminary program evaluation results.

**Objectives:** The IPST curriculum is designed to promote development of fundamental interprofessional collaborative skills through reflection and participation in a series of eight half-day interactive, case-based blended learning sessions over four semesters. The sessions are designed so that students are in the same small (8-10 students) interprofessional group over two years, thus allowing students to create meaningful interprofessional teams.

**Methods:** IPST is being evaluated using a mixed-methods pre-post-follow up design. Quantitative measures of students’ attitudes and perceptions of interprofessional collaboration are administered before and after the eight sessions. Student satisfaction with each IPST session is also collected. Students’ reflective journal submissions, open-ended session feedback and team projects provide for qualitative analysis of collaborative skill development.

**Results:** Preliminary program evaluation results describe baseline quantitative interprofessional attitudes and perceptions, feedback on session content and delivery, and qualitative themes emerging from the reflective journals and team projects.

**Implications:** The Memorial IPST program has the potential to serve as a model for meaningful and consistent interprofessional education. Program evaluation results highlight both curricular and logistical challenges and successes, as well as the advancement of collaborative skills among pre-licensure health and social care students.

**Author Biographies**
Dr. Caroline Porr, RN, PhD is Assistant Professor at Memorial University School of Nursing. She has been on the interprofessional curriculum team of the Centre for Collaborative Health Professional Education representing the School of Nursing. Caroline has a Bachelor of Science in Nursing from McMaster University, a Master of Nursing degree from University of Calgary and a Doctor of Philosophy degree from University of Alberta.

Adam Reid, MASP is the research coordinator at Memorial University’s Centre for Collaborative Health Professional Education, where he designs and implements evaluation and research components of interprofessional education programs. He holds a Masters of Applied Social Psychology from Memorial University and a Bachelor’s of Arts (Honors, Psychology) from Mount Allison University.
Dr. Carolyn Sturge Sparkes, PhD is coordinator of the Aboriginal Health Initiative at Memorial University’s Faculty of Medicine where she designs and implements pathway programs to recruit Aboriginal students into the undergraduate medical program. As Adjunct Professor with the Division of Community Health and Humanities she develops and delivers curriculum to Medicine and Masters of Public Health students. Carolyn holds a Master of Education from Memorial University and a PhD (Integrated Studies in Education) from McGill University.

Andrea Brennan-Hunter, RN, MN is an Assistant Professor at Memorial University’s School of Nursing. Her areas of focus are the nursing care of children and adolescents, curriculum development and program evaluation. Andrea has a Master of Nursing Degree from Dalhousie University. She has worked on interprofessional education (IPE) initiatives with Memorial University’s Centre for Collaborative Health Professional Education for the past eight years.

Dr. Erin Davis, RPh, PharmD is an Assistant Professor at Memorial University’s School of Pharmacy, and a member of the Curriculum Development Team for the Interprofessional Skills Training Program. She has a Bachelor of Science in Pharmacy from Memorial University and a Doctor of Pharmacy degree from the University of British Columbia.

Dr. Delores Mullings, MSW, PhD is an Assistant Professor at Memorial University in the School of Social Work. Her scholarly interests include investigating the implications of foster mothering for the state, teaching andragogy, interdisciplinary collaboration, international distance collaborative teaching, health and social needs of older immigrants, caregivers’ motivation for institutionalizing older Caribbean Canadians, racialization and expression of whiteness in Canadian social policy and the recreation of racism in Canadian Human Rights policies.

P3-88. Longitudinal Analysis of Interprofessional Education: Many programs, many stories.

- **Valerie Ball**, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- **Lesley Bainbridge**, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- **Lynda Eccott**, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- **Christie Newton**, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada

Submitted abstract:

**Introduction:** Does IPE affect the attitudes of health and human service students toward collaborative practice? What types of IPE? These questions are decades old and still need better answers. The College of Health Disciplines at the University of British Columbia has delivered IPE to 15 different programs for over 20 years. In 2010, we started to track aggregate change in attitudes towards IPE using two recognized instruments – the Interprofessional Education Perception Scale (IEPS) and the Readiness for Interprofessional Learning Scale (RIPLS). In 2011, we implemented an online passport system that enables us to track IPE participation.

**Objectives:** The aim of this study is to investigate how students’ attitudes towards IPE change over time; how they change based their participation in IPE; how they have changed with the implementation of
the online Passport; and what types of IPE are affecting attitudinal changes. Ultimately, we will identify which IPE opportunities generate the best return on investment.

**Methods:** This longitudinal study involves administration of an online survey at two points in each academic year. Data collection started in September 2010 and is ongoing. Respondent data will be compared across time and analyzed against the IPE activities respondents track using the online Passport.

**Results:** Preliminary findings indicate that IPE has a positive effect on IP attitudes. Further analysis of the data will provide insight into:

- Differences across professions;
- The impact implementation of the Passport has had on attitudes;
- The amount of IPE that impacts attitudes; and
- The types of IPE activities that impact attitudes.

**Conclusions:** We expect the findings will support early IPE interventions in all programs and enable us to make recommendations for the types of IPE that best support changes in attitudes.

**Author Biographies**

Lesley Bainbridge, BSR(PT), MEd, PhD is the Director, Interprofessional Education in the Faculty of Medicine and Associate Principal, College of Health Disciplines at the University of British Columbia. She is involved in several grants focusing on interprofessional education and collaborative practice, has published in peer reviewed journals on IPE and informed shared decision making and has presented on IPE related topics at national and international conferences.

Lynda Eccott, B.Sc., M.Sc., Senior Instructor, is the Director of Interprofessional Education Curriculum, College of Health Disciplines, and Coordinator of Interprofessional Curriculum, Faculty of Pharmaceutical Sciences at the University of British Columbia. She chairs the IPE Curriculum Committee and has been involved with developing, implementing and evaluating IPE at UBC since 2007.

Valerie Ball, (Presenter) RN, BCom(H), is the Research Coordinator at the College of Health Disciplines at the University of British Columbia. She is involved with the research portfolio and collaborations that study the impacts, outcomes and challenges associated with the delivery of interprofessional health care education.

**P3-89. Extrinsic and Intrinsic Elements that may Impact Students’ Perceptions of and Willingness to Internalize Interprofessional Education Program Goals**

- **Barret Michalec**, University of Delaware, Newark, DE, USA
- **Carolyn Giordano**, Thomas Jefferson University, Philadelphia, PA, USA
- **Brandie Pugh**, University of Delaware, Newark, DE, USA
- **Christine Arenson**, Thomas Jefferson University, Philadelphia, PA, USA
- **Elizabeth Speakman**, Thomas Jefferson University, Philadelphia, PA, USA

**Submitted abstract:**

An increasing number of health profession education institutions are constructing and implementing Interprofessional Education (IPE) programs. Various evaluative efforts are therefore underway to explore students’ perceptions of these programs, nuances of the interdisciplinary interactions within programs, and the potential long-term impact of these programs on students’ mentality towards team-
based, collaborative care. This study, however, examines how elements specific to and outside of an IPE program may impact students’ perceptions of the program and their willingness to engage with prominent aims and goals of IPE. In-depth, semi-structured interviews were conducted with 16 students from varying disciplines at the end of years one and two of a 2-year IPE program. Data were analyzed utilizing a multi-step inductive and deductive process to identity consistent patterns in students’ perceptions of and attitudes toward the program from year one to year two. The data show that although students felt they understood the value and importance of interprofessionality and team-based care, there were elements that were intrinsic (assignments, time constraints, level of accountability) and extrinsic (anticipatory socialization, lack of professional identity) to the IPE program that impacted their perceptions of the program, and that these perceptions, in turn, affected their level of commitment to the program. Further examination of these factors suggests that students struggled specifically with how their program negotiated: a.) fostering understanding of each specific discipline/profession as well as advocating for team-based care, and b.) the informal vs formal nature of the program. The findings of this study shed a valuable new light on how elements related to an IPE program’s structure and implementation as well as factors outside of the program may affect and influence the acculturation of person-centered team-based care.

Author information:
Barret Michalec, PhD is an Assistant Professor in the Department of Sociology at the University of Delaware. He also serves as the Assistant Director of Health Research within the Center for Drug & Alcohol Studies (at UD), and is an adjunct Research Assistant Professor of Community & Family Medicine at Jefferson Medical College. His work focuses on socialization and professionalization processes and mechanisms within health professions education.

Carolyn Giordano, PhD is the Director of the Office of Institutional Research at Thomas Jefferson University and is responsible for providing student and faculty outcome data and has presented and published in the area of interprofessional education at varies national and international conferences.

Christine Arenson, MD received her medical degree from Jefferson Medical College and is board certified in Family Medicine and Geriatric Medicine. She is Professor and Interim Chair of the Department of Family and Community Medicine. She is the co-director of the Jefferson InterProfessional Education Center. Her work focuses on implementing and evaluating interprofessional education and collaborative practice models. She led development of the Jefferson Health Mentors Program, and has published and spoken widely on these topics.

Elizabeth Speakman, EdD, RN, ANEF is Co-Director of the Jefferson Interprofessional Education Center and Associate Professor in Nursing at Thomas Jefferson University. Dr Speakman is an Academy of Nursing Education Fellow, and a Robert Wood Johnson Foundation Executive Nurse Fellow. Dr. Speakman has been a nurse educator for 28 years with over 75 national presentations. Dr. Speakman received a BS in Nursing from Wagner College, and her Masters and Doctorate in Education from Columbia University.

P4-1. The ICF (International Classification of Functioning, Disability and Health) as a tool to promote collaboration readiness in interdisciplinary teams

- **Olaf Kraus de Camargo**, McMaster University, CanChild Research Institute for Childhood Disability, Hamilton, ON, Canada
- **Nora Fayed**, University Health Network, Toronto, ON, Canada
Submitted abstract:

**Background:** The ICF concept of health provides perspectives on people’s lives through the lens of functioning. This view of health promotes an integration of a patient’s body functions and structures, activities performed in daily life, and the personal and social roles that constitute their participation in life situations. A person’s functioning occurs within the context of their environment as well as personal factors such as their age, culture, personal preferences and educational status. According to this framework, when there is discordance among these components of functioning, disability ensues. Health professionals have varied disciplinary language, training and culture that all emphasize certain domains of patient’s functioning over others. However, adoption of the ICF implies that all members of a clinical team are motivated to improve their patient’s functioning within a common conceptual approach.

**Objectives:** Introduce the ICF to the audience an empower them to reflect on their own professional roles as described by the ICF

**Methods:** In the first part of the session we will use a case example of an interdisciplinary feeding clinic to illustrate the techniques used to identify core competencies, overlaps and gaps within that interdisciplinary team. The second part of the session will be interactive with small teams of 3 to 4 participants discussing their own professional background, competencies and limitations using the ICF framework as well as ICF items provided in short lists by the speakers. The final wrap---up will reflect on possible implementation of the ICF in interdisciplinary practice.

**Results:** We expect to raise awareness to the important concept of promoting participation, especially in patients with chronic health conditions that need the care of an interdisciplinary team. We hope to show that developing a common language provided by the ICF can leads to a better communication among team members, a clearer understanding of the complementarity of a team towards more transdisciplinarity over time. This also helps to improve the communication with the patients, keeping the focus on meaningful outcomes.

P4-2. Medication Reconciliation: Will the Real Medication List Please Stand Up?

- Zachary Marcum, University of Pittsburgh, Pittsburgh, PA, USA
- Anne Kisak, UPMC, Benedum Geriatrics at Magee-Womens Hospital, Pittsburgh, PA, USA
- Neil M. Resnick, University of Pittsburgh / UPMC, Pittsburgh, PA, USA

Submitted abstract:

**Background:** Medication reconciliation on admission to the hospital is an essential step to prevent downstream medication discrepancies and adverse drug events. At Magee-Womens Hospital (MWH) of UPMC, nurses document initial medication lists as soon as possible upon admission. Pharmacists are not involved in admission medication reconciliation at MWH. **Objectives:** To describe the prevalence of medication clarifications (i.e., initial differences between outpatient medication list and first-documented list that require clarification to be reconciled) and medication discrepancies (i.e., unexplained differences between outpatient medication list and inpatient list present after 24 hours) detected by a pharmacist-led admission medication reconciliation process improvement project.

**Methods:** Prospective study of a convenience sample of older adults (65+) admitted to MWH. **Results:** From August to October 2013, 42 patients have been completed. The total number of medication
clarifications was 160 (mean, 3.8 per patient), with drug omission (n=78/160) and wrong dose (n=32/160) the most common reasons. The total number of medication discrepancies was 31 (mean, 0.74 per patient). Based on the pharmacist’s assessment, the source that provided the best possible medication list was as follows: community pharmacy (52.4%), inpatient electronic health record (23.8%), outpatient electronic health record (21.4%), and patient/caregiver (2.4%). We plan to continue data collection at the same hospital to allow for a total sample size of 100.

**Implications:** Initial medication lists had an average of 3.8 medication clarifications and 0.74 medication discrepancies per patient; these have the potential to start a cascade of medication misinformation. Drug omission was the most common reason for a medication clarification. This is important to patient safety because subsequent providers and consultants rely upon these initial medication lists. Contrary to popular belief, our project shows that community-based pharmacy sources offer an often neglected, but important, medication list in addition to electronic-based medication lists from the inpatient/outpatient settings and patient/caregiver reports.

**Author Biographies**

Zachary A. Marcum, PharmD, MS: Dr. Marcum is Assistant Professor of Medicine at the University of Pittsburgh, School of Medicine’s Division of Geriatric Medicine. He conducts clinical research in the areas of medication safety, medication adherence, and transitions of care in older adults. He completed his PharmD at Butler University, a pharmacy residency at the Indianapolis VAMC, and a 2-year Postdoctoral Fellowship in Geriatric Pharmacotherapy Research at the University of Pittsburgh.

Anne Kisak, BC-FNP: Anne Kisak works for Benedum Geriatrics at Magee-Womens Hospital. She is a graduate of the University of Pittsburgh School of Nursing MSN and BSN programs and Frostburg State University MBA program. Her past work experience includes 20+ years as a bedside nurse and also in clinical and senior management. Past roles have included key positions in system-wide operational projects and initiatives, including an international project on computerized physician decision support.

Neil M. Resnick, MD: Dr. Resnick is the Thomas Detre Professor and Chief of Geriatrics at UPMC and University of Pittsburgh. Prior to this, he established the Division of Gerontology at Harvard’s Brigham and Women’s Hospital, launched the country’s first Continence Center, and conducted NIH-funded research on geriatric syndromes. He and his colleagues are now working to re-engineer geriatric care, both to improve it and to incorporate this improvement into routine care so that it will be delivered automatically.

**P4-3. A Collaboration Ready Workforce: The LHCH Healthcare Assistant Pathway**

- **Steven Colfar**, Liverpool Heart and Chest Hospital, NHS Foundation Trust, Liverpool, England, UK
- **Aaron Isted**, Liverpool Heart and Chest Hospital, NHS Foundation Trust, Liverpool, England, UK
- **David Foulkes**, Liverpool Heart and Chest Hospital, NHS Foundation Trust, Liverpool, England, UK

**Submitted abstract:**

Interprofessional Education (IPE) is vital in the collaborative approach to providing excellent patient family centred care. However in light of recent evidence, national shortfalls in IPE within certain staff groups have contributed to substandard delivery of care. Healthcare Assistants (HCAs) are a staff group that spend a high proportion of their time providing direct care to patient across the multi-professional
workforce. Their role in the provision of care is committed, however recent enquiries have identified that this staff group receive no formal training or structured delivery around IPE (Francis, 2013).

Liverpool Heart and Chest Hospital (LHCH) has acknowledged this shortfall and committed itself to supporting HCAs in the development of their knowledge, skill and clinical competence within the multi-professional workforce. Since September 2012, LHCH has pioneered an individualised HCA Pathway that has seen over 75% of its HCA workforce develop their competence in a variety of practice areas. Initially, the 3 day HCA Pathway was designed to incorporate a blended approach to IPE through the provision a theoretical foundation with practice skills taught in addition. However, further individualised IPE approaches have led to the delivery of workshops, presentations, interactive group learning and self-directed study. As a IPE support mechanism HCAs were further allocated a mentor to better collaborative working. The mentor’s role was to identify and agree the learning needs of the HCA throughout the pathway whilst promoting reflective practice. This reflective practice related to the Trusts Values and Behaviours and the direct impact of interprofessional working on patient care.

From the September 2012 cohort, 75% of attendees stated that the HCA Pathway met all their objectives “very well”. As a result, IPE continues to play a strong part in the HCA Pathway to ensure a “collaboration ready” healthcare workforce is always at the centre of patient care at LHCH.

References:

Author Biographies
Steven Colfar is currently working as Deputy Head of Learning and Development at Liverpool Heart and Chest Hospital. A staff nurse by background with specialism’s in acute cardiothoracic care. Previous experience has occurred on surgical wards and critical care units.

Aaron Isted is currently working as a Practice Education Facilitator at Liverpool Heart and Chest Hospital. Over 4 years working as a clinical exercise physiologist for the National Health Service, with a keen interest in interprofessional and strategic education

David Foulkes is currently working as the Manual Handling Lead for Liverpool Heart and Chest Hospital. A staff nurse by background, David has worked on a wide range of surgical and medical ward areas. David has always had a keen interest in IPE and the development of HCAs in practice.

P4-4. Implementation of a Behavioral Health Interdisciplinary Program

- **Eun Ha Kim**, VA Tennessee Valley Healthcare System, Alvin C. York VAMC, Murfreesboro, TN, USA
- **Jennifer Easterling**, VA Tennessee Valley Healthcare System, Alvin C. York VAMC, Murfreesboro, TN, USA
- **Erin Patel**, VA Tennessee Valley Healthcare System, Alvin C. York VAMC, Murfreesboro, TN, USA
- **Rebecca J. Rossello-Pate**, VA Tennessee Valley Healthcare System, Alvin C. York VAMC, Murfreesboro, TN, USA

Submitted abstract:
**Background:** For over a decade, health care organizations have made efforts to facilitate changes in health care delivery toward an integration of multiple disciplines by creating initiatives on health care reform (e.g., IOM, 2006). In addition, organizations such as the US Department of Veterans Affairs (VA) have supported interprofessional education in order to accommodate interprofessional practice (US Department of Veterans Affairs, 2010).

**Objectives:** This study aims to evaluate the establishment of a Behavioral Health Interdisciplinary Program (BHIP) and a related didactics series on interprofessional education at a VA medical center by assessing patient satisfaction ratings and changes in trainees’ attitudes, competencies, and knowledge of interprofessional healthcare.

**Methods:** Data will be collected at a Veterans Affairs Medical Center in Tennessee. Patient satisfaction surveys will be collected from veterans receiving mental health care through the BHIP at three and six month periods post-enrollment to assess for changes in satisfaction ratings with longer duration of received care. In addition, trainees from various professions will be provided self-report questionnaires assessing attitudes (University of the West of England Interprofessional Questionnaire; UWE IPQ; Pollard, 2004), competencies (Collaborative Practice Assessment Tool; CPAT; Schroder, 2011), and knowledge (Core Competencies Knowledge Quiz) of interprofessional practice upon their initial session and at the end of their didactic training. T-tests or Wilcoxon rank sum will be used to compare means across pre- and post- measures.

**Results and Implications:** Data collection will be ongoing. It is also hopeful that results will reveal high and increasing patient satisfaction ratings with continued services, supporting the benefits of an interprofessional model. The authors also hope to find that interprofessional education increases trainees’ positive attitudes, competencies, and general knowledge of interprofessional health care. This study will provide implications for the future training of health care providers as healthcare continues to become further integrated across disciplines.

**Author Biographies**

Eun Ha Kim, Ph.D., is a Clinical Psychology Postdoctoral Fellow at the Veterans Affairs Tennessee Valley Healthcare System and Alvin C. York Veterans Affairs Medical Center (VAMC) campus in Murfreesboro, TN. She received her Doctor of Philosophy in Psychology from the University of Mississippi and completed her internship at the Medical College of Georgia/Charlie Norwood VAMC. In addition to interprofessional care, Dr. Kim is interested in cognitive-behavioral and mindfulness-based therapies, health psychology, and yoga therapy.

Jenny Easterling, Pharm.D., is a PGY2 Psychiatric Pharmacy Resident at the VA-Tennessee Valley Healthcare System, Alvin C. York Campus in Murfreesboro, TN. She graduated with her Doctor of Pharmacy from the University of Tennessee Health Science Center in Memphis, TN, and completed her PGY1 pharmacy practice residency at the VA-Tennessee Valley Healthcare System in Nashville, TN. Dr. Easterling is actively involved in teaching and precepting student pharmacists and PGY-1 residents.

Erin Patel, Psy.D., is a Licensed Clinical Psychologist at the Alvin C. York VAMC in Murfreesboro, TN. She received her graduate training at Nova Southeastern University and completed her clinical internship at the Vanderbilt University- VA Internship Consortium. She is the Postdoctoral Fellowship Coordinator at the ACY VAMC and has worked to develop the first Behavioral Health Interdisciplinary Program (BHIP) clinic at this VA. Dr. Patel is actively involved in teaching and supervision of trainees.
P4-5. Evaluating the Financial Sustainability of the Richmond Health and Wellness Program

- **Ross K. Airington**, Virginia Commonwealth University, Office of Health Innovation, Richmond, VA, USA
- **Leland Waters**, Virginia Commonwealth University, Richmond, VA, USA
- **Paul E. Mazmanian**, Virginia Commonwealth University, Richmond, VA, USA
- **Kelechi C. Ogbonna**, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA

Submitted abstract:

**Background:** Many innovative programs in academic healthcare experience decreased funding before essential systems and services are fully implemented. The Richmond Health and Wellness Program for Older Adults (RHWP) is a novel interprofessional education and collaborative practice providing: 1) patient and community centered care for low-income elders housed in a federally subsidized apartment building, and 2) transformative education and clinical experiences for healthcare students and community. A fundamental goal of RHWP is to identify and pursue a diversified and reliable long-term funding base to assure ongoing education and clinical services to patients and populations.

**Objectives:** 1. Demonstrate the practicability and feasibility of quantifying the value of cost avoidance in the program. 2. Assess the long-term financial sustainability of the program based on cost-avoidance measures, billing for services, and aligned educational resources.

**Methods:** Financial performance will be assessed through: 1) cost-avoidance, and 2) income generated through payment for healthcare and academic services. Using validated tools including the New York University Emergency Department (ED) Algorithm and the Charlson Comorbidity Index, the program will estimate cost-avoidance such as decreased ambulance, ED, inpatient, and outpatient hospital utilization. To offset actual program costs, the program developed a shadow billing system and is pursuing reimbursement through Medicaid Administrative Claiming and Virginia’s financial alignment demonstration initiative for Medicare-Medicaid enrollees.

**Results:** Data describing RHWP patients and patient visits will elaborate the business model, including services, revenue, expenses, and requirements for projected sustainability.

**Implications:** At a minimum, sustainability depends on whether total revenues exceed total costs. Long-term sustainability of the RHWP depends upon its ability to: 1) educate community members and health professions students, 2) provide care, offset costs, and avoid utilization, and 3) convince payers of its value.

**Author Biographies**

**Ross K. Airington, MPA** Mr. Airington is the Health Policy Analyst for the VCU Office of Health Innovation. Mr. Airington holds a Bachelor of Arts in Political Science from James Madison University, and a Master of Public Administration from the VCU Wilder School of Government and Public Affairs.

**Leland Waters, PhD** Dr. Waters is the assistant director for the Virginia Geriatric Education Center and program manager for the statewide Geriatric Training and Education (GTE) initiative at Virginia Center on Aging. He currently serves as Treasurer on the Association for Gerontology in Higher Education (AGHE) Executive Committee and recently chaired the AGHE Faculty Development Committee.

**Paul E. Mazmanian, PhD** Dr. Mazmanian, Professor of Family Medicine and Population Health, Virginia Commonwealth University, serves as Associate Dean, Assessment and Evaluation Studies, School of
P4-6. Team building training – Facilitating Interprofessional teams – a continuing process for quality of care

- **Uffe Hylin**, Karolinska Institutet, Stockholm, Sweden
- **Margaretha Forsberg Larm**, Karolinska Institutet, Stockholm, Sweden
- **Sari Ponzer**, Karolinska Institutet and Södersjukhuset, Dept of Orthopaedics, Stockholm, Sweden
- **Marie Sjöstedt**, Karolinska Institutet and Södersjukhuset, Stockholm, Sweden

**Submitted abstract:**

_Background_: Health care is managed by professionals who often work in teams even if most students are still educated in their own profession. Interprofessional learning (IPL) activities have become more common, but to guide the students to learn from, with and about each other the facilitators need specific competence.

Learning together promotes team work and aims also to enhance patient safety and good patient care. At Karolinska Institutet, Stockholm, Sweden, all programs have IPE learning outcomes, and health care students from 4 programs participate in a 2-week mandatory course at a clinical interprofessional training ward (IPTW).

Experiences from 15 years interprofessional learning activities at Karolinska Institutet illustrate how IPE/IPL can be developed, implemented, managed and sustained both for undergraduate students and for students during specialist training.

_Objectives:_ The objectives with the workshop are to get experience and understanding of some methods for how students from different health care educations can be facilitated in their development towards a well working team.

_Method:_ The workshop will be based on the team building training IPE students at Karolinska Institutet receive before their 2 week practical course at an interprofessional training ward. After a short overview and a presentation of theoretical background, participants will be divided in smaller groups for the practical team building exercises. After each exercise, the performance and result will be discussed. Also prerequisites and conditions for implementation in different settings will be discussed. Practical training and small group discussions will be important parts of the workshop. We would also like to discuss the value of team building activities as a part of IPE and give examples of how we work with assessment of team competence.

_Results:_ The team building training improves teamwork and collaboration in the student teams at an interprofessional training ward. After team building training the students are more interested in each other and in each others’ work, the team members communicate better, share work and solve problems in the teams before asking the facilitators.

_Author Biographies_

Uffe Hylin, MD, PhD, is senior lecturer in interprofessional education and orthopedic surgery, and senior consultant in orthopedic surgery. Uffe has been supervising students at the Interprofessional Training Ward since 1999, became specialist in orthopedic surgery in 2003, and defended his thesis on
Interprofessional Education in 2010. He is responsible for undergraduate medical education in orthopedic surgery and interprofessional education at the Department of Clinical Science and Education, Karolinska Institutet, Södersjukhuset.

Margaretha Forsberg Larm (Senior Lecturer, Lic, RNT) Director Centre for Clinical Education, a joint organization between Karolinska Institutet, Stockholm County Council and three University Collages. Her work is focused on facilitating clinical pedagogic development such as courses, workshops and learning environment. For 15 years she has been supporting IPL/IPE and works in national and international research and development projects. Since the start member of NIPNET and EIPEN and a member of NIPNET steering group.

Sari Ponzer, MD, is Professor of Orthopedic Surgery at Karolinska Institutet and the Head of the Department of Orthopedics, Södersjukhuset. Sari became specialist in orthopaedic surgery in 1994 and defended her PhD thesis in 1996. Sari Ponzer has published over 100 scientific papers in orthopedics, traumatology and medical education. She has supervised/co-supervised 17 PhD students and chaired Kls curriculum committee for undergraduate medical education and was responsible for the last reform of Kls Nursing program.

Marie Sjöstedt, RN, MSc, is the Head nurse of Interprofessional Training Ward and ward for elective orthopaedic Surgery. Adjunct Clinical Teacher at Department of Clinical Science and Education, Karolinska Institutet, Södersjukhuset. Marie Sjöstedt has worked with interprofessional clinical education since 2000.

P4-7. Validation of the IEPS: A Swedish translated version

- **Sari Ponzer**, Karolinska Institutet and Södersjukhuset, Dept of Orthopaedics, Stockholm, Sweden
- **Marie Sjöstedt**, Karolinska Institutet and Södersjukhuset, Stockholm, Sweden
- **Susanne Kalén**, Karolinska Institutet and Stockholm County Council, Stockholm, Sweden
- **Hanna Lachmann**, Karolinska Institutet and Sophiahemmet University, Stockholm, Sweden

Submitted abstract:

**Background:** Healthcare delivery is dependent on many factors in order to achieve positive patient outcomes, such as the ability of the healthcare team to work cohesively and cooperatively in an interprofessional manner. One scale that measures interprofessional cooperation is the Interdisciplinary Education Perception Scale (IEPS). While the IEPS is widely used in throughout the interprofessional literature, its cross-cultural psychometric properties are unknown.

**Objectives:** The objective of the study was to examine the psychometric properties of the IEPS when translated in Swedish.

**Methods:** Firstly, the IEPS was cross-culturally validated into Swedish. Secondly, 200 students were asked to fill in the IEPS and the RIPLS. In addition, 30 students were asked to fill in the same questionnaires 2 weeks later (test-retest).

**Results:** Psychometric results are currently being examined. These results will include reliability (internal and external consistency) and validity (dimensionality) findings.
Implications: This study will provide further construct validity of the IEPS, and provide a culturally-valid tool to measure interprofessional cooperation.

P4-8. Interprofessional collaboration in the community: An education and museum partnership

- Nancy Baker, University of Pittsburgh, Pittsburgh, PA, USA
- Joanne Baird, University of Pittsburgh, Pittsburgh, PA, USA
- Denise Chisholm, University of Pittsburgh, Pittsburgh, PA, USA

Submitted abstract:
Background: Interprofessional collaboration takes many forms. Providing health professional students with opportunities to engage in team-based interprofessional partnerships with community groups provides dual benefits: it educates students about strategies to effectively collaborate with non-healthcare professionals and it helps students develop critical thinking skills to identify public health-based interactions. This presentation describes interprofessional collaborations between occupational therapy students and museum staff to develop increased accessibility to a non-profit, all-ages regional museum.

Objectives: To describe: 1) a practice experience developed in partnership by occupational therapy students and museum staff; 2) instructor-, student-, and staff-identified benefits of team-based collaborations; 3) educational methods used to support these collaborations.

Methods: Over the past three years, graduate occupational therapy students have redesigned or developed exhibits or activities at a non-profit regional museum serving all ages. These practical experience projects have included improving interactions with existing exhibits, developing new exhibits, and working with museum educators to increase existing educational programming accessibility. In all cases, students worked closely with museum staff to develop and implement solutions that were age appropriate, accessible, scientific, and met budgetary and museum parameters, yet provided opportunities for full participation in the museum environment.

Results: Students demonstrated clinical behaviors indicating readiness for interprofessional interactions. For example they learned the museum staff “language” and translated their own professional language to facilitate interactions. Additionally, they demonstrated flexibility and adjusted their plans to achieve budgetary and learning requirements. Students reported that their experiences were transformative and helped them to understand the “real world” requirements of how to collaborate with other professionals to achieve a common goal.

Implications: This collaboration provided students with unique opportunities to develop collaborative skills and a respect for the expertise of other professionals to improve health and participation. Working at the community level, students learned to address population health through community involvement.

Author Biographies
Nancy Baker is an Associate Professor in the Department of Occupational Therapy at the University of Pittsburgh. Dr. Baker has a degree in epidemiology and is interested in the application of epidemiology with the occupational therapy context. Her research has focused on developing interventions to adapt the work environment to facility musculoskeletal health in workers.
Denise Chisholm is an Associate Professor and Vice Chair of the Department of Occupational Therapy at the University of Pittsburgh. Dr. Chisholm’s clinical experience is in psychosocial and cognitive rehabilitation and the development of participation-based educational programs in community-based settings.

Joanne Baird is an Assistant Professor in the Department of Occupational Therapy at the University of Pittsburgh and is the CRS Coordinator of Clinical Education and Professional Development for UPMC. Dr. Baird’s clinical and research experience is in learning and teaching in the clinical environment.

**P4-10. An Interprofessional Falls Assessment Clinic Model to Develop Collaborative Team Skills among Health Professional Students**

- **Brooke Salzman**, Thomas Jefferson University, Philadelphia, PA, USA
- **Emily Hajjar**, Thomas Jefferson University, Philadelphia, PA, USA

**Submitted abstract:**
Older adults are at increased risk for falls and fall related injuries, leading to loss of independence, disability, and increased mortality. In new practice models, such as the Chronic Care Model, there is a growing emphasis on interprofessional collaboration in community-based services. Studies indicate that interprofessional collaborative teams can help in decreasing falls and potential falls in the geriatric population.

The Eastern Pennsylvania-Delaware Geriatric Education Center (EpaD GEC) has developed an Interdisciplinary Falls Assessment Clinic which uses evidence based standard of care practice to evaluate and manage older adults who have fallen or at risk for falling. This program serves community-dwelling older adults by using an interprofessional multifactorial screening approach to assess an individual's falls risk. The falls assessment team’s mission is to integrate the 4 core competencies of interprofessional collaboration (values/ethics, roles and responsibilities, interprofessional communication, and interprofessional teamwork and team-based care) into practice.

This program also provides a clinical educational opportunity for students in medicine, nursing, physical therapy, occupational therapy, pharmacy, and social work to train and work together as an interdisciplinary team. Health profession students have the opportunity to identify roles and responsibilities of team members and practice communication and collaboration skills in an interprofessional climate. Presenters will share preliminary data on perceived student benefits of participating in an interprofessional clinical experience.

**Learning Objectives:**
- Understand the roles of health care professionals in managing falls in older adults and the benefits of an interprofessional healthcare team.
- Use methods from the Interprofessional (IP) falls clinic model to guide, develop, and implement IP services in your home institution.
- Discuss the educational impact of an Interdisciplinary Falls Assessment clinic to enhance interprofessional learning in geriatrics for health profession students.
- Recognize the process and challenges in creating an interdisciplinary Falls Assessment clinic involving students from various health fields.
**Author Biographies**

Tracey Vause Earland has 30 years of clinical experience and is an assistant professor at Thomas Jefferson University. Tracey is a consultant to the Eastern Pennsylvania-Delaware geriatric education center at Thomas Jefferson University and has developed innovative practice models, curricula, and programs (e.g. Falls prevention clinic) to improve geriatric expertise among health professionals, students, and faculty.

Leigh Ann Hewston, PT, MEd serves as an assistant professor at Thomas Jefferson University. Ms. Hewston’s research centers on evaluation of interprofessional education activities as it relates to older adults with chronic conditions. Additional research includes heart failure and physical therapy intervention. Leigh serves on the steering committee of the Eastern Pennsylvania-Delaware geriatric education center at Thomas Jefferson University and has developed innovative practice models, curricula, and programs to improve geriatric care.

**P4-11. Role Clarification: A Study of its Process and Measurement for Interprofessional Client-Centred Care**

- **Dianne Allen**, University of Western Ontario, London, ON, Canada
- **Carole Orchard**, Western University, London, ON, Canada
- **Marilyn Evans**, University of Western Ontario, London, ON, Canada
- **Eunice Gorman**, University of Western Ontario, London, ON, Canada
- **Mickey Kerr**, University of Western Ontario, London, ON, Canada

Submitted abstract:

**Background:** The evolution of health care practice has increased the demand for practitioners to function within a variety of shared roles using an approach where clients are included in the circle of care. This evolution requires practitioners to articulate their roles within the interprofessional (IP) team and to their clients. Equally important is engagement between practitioners to develop a shared meaning of what each brings to client care and how the complement of IP roles enhances that care. This study proposes that effective role clarification can be achieved when practitioners engage with other professions in a way that assists the socialization and valuing of one another. Practitioners possess a repository of personal factors that influence their engagement with others and in addition to a number of qualitative variables (e.g. years in practice), this study proposes that practitioners’ perceived self-efficacy and conscientiousness will moderate their engagement with other IP team members.

**Objectives:** 1) Provide insight into role clarification as an IP competency. 2) Discuss underpinning theories and concepts proposed to lead to effective role clarification. 3) Explore the applicability and relevance of proposed model to participants’ vision of role clarification in practice.

**Methods:** The study’s proposed model will be described in detail including how it will be tested. Participants will be asked to respond to the model and interact with the presenter with questions and comments to assist in furthering this work.

**Results:** This study is in early stages of formulation.

**Implications:** This study will add to knowledge base regarding the process of role clarification as outlined by the Canadian Interprofessional Health Collaborative (CIHC). Another intended outcome is to
provide an understanding of the theories and concepts that are associated with role clarification and may assist in the work that CIHC is carrying out to create a measure for its competency framework.

P4-12. Improving quality and reducing costs: how digital storytelling is transforming health and social care

- Pip Hardy, Pilgrims Project Ltd, Cambridge, England, UK
- Tony Sumner, Pilgrims Project Ltd, Cambridge, England, UK

Submitted abstract:

**Background:** Recent scandals and high profile reports in the UK and elsewhere (Francis, 2013; Berwick, 2013) highlight the need for more compassionate, person-centred care. Telling, sharing and listening to stories from all stakeholders in health and social care can contribute significantly to the transformation of care that is careful as well as safe and of the highest quality. Digital technologies enable patients, carers or professionals to share their digital stories across the world (Hardy, 2007). Creating and sharing these ‘distillations’ of experience offer opportunities to explore painful, difficult and dangerous experiences and to recognise the role of emotional or spiritual pain in the experience and practice of healthcare.

**Objectives:** Established in 2003, Patient Voices (www.patientvoices.org.uk) brings greater humanity and compassion to health and social care through creating and disseminating digital stories from all stakeholders in care, which contribute to:
- narrative knowledge and the evidence of experience
- professional and workforce development
- better, safer, more humane, inter-professional and co-produced care (Hardy, 2004).

**Methods:** Patients, service users, carers and professionals create reflective digital stories of experiences of care in small, carefully facilitated workshops. With permission, stories are released via the Patient Voices website and used in Board meetings, staff training, induction, organisational development, recruitment, undergraduate and post-graduate training and within communities. Action plans and strategies for change and improvement derived from stories and, often, co-produced with storytellers, form the basis of service transformation.

**Results:** Care that is co-produced in this way becomes more careful, respectful, dignified, humane and compassionate.
One two-year project, for example, shows that creating and sharing stories inter-professionally and extra-professionally reduces complaints and negligence claims, improves patient and staff satisfaction and increases mutual dignity and respect (Cahoon et al 2013; Stanbridge, 2013).

**Implications:** Humane, dignified, respectful, compassionate care, delivered by practitioners with humility, humanity and compassion for each other is not only safer and more satisfying, but more cost-effective and time-efficient (Hardy and Sumner, forthcoming).

**Author Biographies**
Pip Hardy and Tony Sumner are joint CEOs of Pilgrim Projects and co-founders of the Patient Voices Programme (www.patientvoices.org.uk). The Patient Voices Programme aims to gather and share effective, affective and reflective digital stories created by all stakeholders in care to improve safety and quality, promote understanding and empathy, and offer important inter-professional learning to drive
service improvement and transform the culture of care to one that is characterised by compassion and humanity.

P4-13. Home Visiting Teams: An Interprofessional Collaborative Practice Pilot Program

- Barbara Richardson, Washington State University, Spokane, WA, USA

Submitted abstract:
**Background:** Academic institutions worldwide have been tasked with imbedding interprofessional education (IPE) within health professional programs. Increasingly, opportunities for students to learn with, from and about one another are being implemented in classroom and simulation venues. However, clinical settings where teams may engage in interprofessional collaborative practice (IPCP) are scarce. Aside from occasional projects, few IPCP sites exist where students in nursing, pharmacy, and social work intentionally practice with the goal of improving communication, teamwork, and quality of care.

**Objectives:** The program objectives are two fold, (1) create a longitudinal IPCP experience that encourages and allows students to practice the IPEC (2011) core competencies within the context of (2) providing a first-hand experience where students will gain a better understanding of the social determinants of health through interactions with children and families living in poverty, rural or underserved communities.

**Description:** Eight teams of nursing, pharmacy, and social work students were paired with a child / family with a pre-existing diagnosis of asthma. Families were recruited to participate by school nurses. Teams conducted a series of four monthly home visits, assessing health care needs of the child /family including vaccination status, nutrition, medications, physical activity, and environmental safety. Teams provided appropriate information, advice, and resources for their child / family. The IPCP home visiting program was incorporated within existing clinical courses; not offered in addition to current requirements.

**Results:** Attitudes and self-perception of IPCP skills increased as measured by pre- and post-participation using the Readiness for Interprofessional Learning Survey (Parsell & Bligh, 1999) and the Team Assessment Questionnaire (Baker, Krolos, & Amodeo, 2008). Program evaluation focus groups highlighted the personal and professional growth participants experienced.

**Implications:** A longitudinal home visiting program provides an effective IPCP experience. Health outcomes and patient / family satisfaction data will be collected with future participants.

**Author Biographies**
Barbara Richardson, PhD, RN is the Director of Interprofessional Education and Research at Washington State University. She is co-investigator for a 3 year HRSA advanced nursing education grant aimed at developing and implementing IP team-based classroom, simulation, and practice opportunities for students across multiple health professions. Dr. Richardson organizes and facilitates the Health Care Team Challenge, Community Action Poverty Simulation, and numerous IP workshops for health professional faculty and students across three universities. Rie Kobayashi, PhD, MSW, is Assistant Professor of Social Work at Eastern Washington University. She teaches Social Work in Health Care and focuses her research on health and interprofessional collaboration/education.
P4-14. Curriculum Redesign the in the Entry-Level Professional Physical Therapy Program: Teaching Students to put Evidence into Practice

- Anthony Delitto, University of Pittsburgh, Department of Physical Therapy, Pittsburgh, PA, USA
- James Irgang, University of Pittsburgh, Department of Orthopedic Surgery, Pittsburgh, PA, USA
- M. Kathleen Kelly, University of Pittsburgh, Department of Physical Therapy, Pittsburgh, PA, USA
- Joel Stevans, University of Pittsburgh, Department of Physical Therapy, Pittsburgh, PA, USA
- Debra L. Miller, University of Pittsburgh, Department of Physical Therapy, Pittsburgh, PA, USA

Submitted abstract:

**Background:** Health care systems and clinical practice sites routinely complain that professional students are insufficiently prepared at graduation to adequately participate in collaborative clinical environments. Anecdotal reports indicate that it can take up to two years for practices sites to bring new graduates “up to speed” with the skills necessary to be a fully functioning member of the healthcare team. As educators we must heed this feedback and redesign our curricula and clinical training experiences to ensure our students leave our programs with the skills necessary to be "collaboration ready”.

The Department of Physical Therapy at the University of Pittsburgh has formalized an academic-practice feedback loop with several of our leading clinical partners. The result of the nexus between education and practice compelled us to create programmatic changes to teach our Doctor of Physical Therapy (DPT) students to identify opportunities for personal skill development and interprofessional collaboration to meet the needs of their patient population.

**Objectives:** The objectives of this presentation are to: 1) describe the learning generated from our education-practice feedback process; 2) outline how this partnership informed the redesign or our DPT curricula; and 3) present an exemplar of our students’ pragmatic clinical experiences.

**Methods:** All third year DPT students participate in a yearlong clinical internship. The internships take place in a variety of inpatient and outpatient environments. All students are required to identify valid and reliable outcomes measures applicable to the clinical population they are serving. Once identified students are required to collect process of care, clinical outcome, and utilization metrics throughout their internship. At the mid-point of the internship, students consolidate and present their findings to the faculty in the form of a quality improvement exercise. After feedback from faculty and their peers, students design changes to be implemented in the 2nd 6 months of the internship. Finally, a capstone event occurs just prior to graduation where the results of the QI initiative are presented in writing and in an oral format to an interprofessional audience.

**Results:** The redesigned curriculum initiated in 2004 as part of the transition to the Doctor of Physical Therapy at the University of Pittsburgh and has been ongoing ever since.

**Implications:** The program allows us to evaluate how well students implement evidence-based practice standards in real-life clinical environments, including adherence rates to best care principles, compliance rates with regard to completed datasets for all patients seen and outcome changes that can be benchmarked to known standards.

**Author Biographies**
Anthony Delitto, PT, PhD, FAPTA is the Professor and Chairman of the Department of Physical Therapy at the University of Pittsburgh, School of Health and Rehabilitation Sciences (SHRS), Associate Dean for Research, SHRS, and Vice President for Education and Research, Centers for Rehab Services. He received his BS in Physical Therapy from SUNY Buffalo, NY, his MHS in Physical Therapy and his PhD from Washington University, St. Louis, MO. Dr. Delitto has authored or co-authored over 100 peer-reviewed research papers.

James J. Irrgang, PT PhD ATC FAPTA is the Director of Clinical Research and Professor in the Department of Orthopedic Surgery at the University of Pittsburgh School of Medicine. Dr. Irrgang received a BS in Physical Therapy in 1977, a MS in Health Related Professions with an emphasis in Sports Physical Therapy in 1991 and a PhD in Research Methodology with an emphasis in Educational and Psychological Measurement in 1999, all from the University of Pittsburgh.

M. Kathleen Kelly, PhD, PT is Vice-Chair in the Department of Physical Therapy and is a faculty member of the LEND Center, an MCHB funded training grant. Dr. Kelly earned her BS (Physical Therapy) from the University of Pittsburgh; an M.S. from Hahnemann University (Pediatric Physical Therapy) and a PhD from the University of Pittsburgh (Health & Rehab Sciences with emphasis in Neurobiology). She continues to maintain clinical practice at Children’s Hospital of Pittsburgh.

P4-15. The Student Health Center: A Novel Interprofessional Training Program for Second Year Doctor of Physical Therapy Students

- **Lynn Fitzgerald**, University of Pittsburgh, Department of Physical Therapy, Pittsburgh, PA, USA
- **Joel Stevans**, University of Pittsburgh, Department of Physical Therapy, Pittsburgh, PA, USA
- **Anthony Delitto**, University of Pittsburgh, Department of Physical Therapy, Pittsburgh, PA, USA

Submitted abstract:

**Background:** Identifying robust, pragmatic interprofessional training opportunities is an ongoing challenge. The University of Pittsburgh Student Health Service (SHS), a top ranked primary care facility is staffed by medical doctors, nurses, nurse practitioners, physician assistants and a pharmacist who serve the healthcare needs of graduate and undergraduate students. The SHS’s interprofessional team recognized the need to provide physical therapy services to their patient population. In response to this need a co-located physical therapy clinic run by second year Doctor of Physical Therapy (DPT) Students was developed within SHS. DPT students work with the interprofessional team and are supervised by physical therapy academic faculty.

**Objectives:** The purpose of the study is to describe DPT students’ interprofessional educational experiences and report the clinical outcomes of rehabilitation patients treated within the SHS clinic.

**Methods:** A mixed methods study design was utilized. Qualitative interviews were conducted with each DPT student at the end of their clinical rotation. Standardized clinical outcome measurements were used at initial evaluation and follow-up to assess the functional progress of the rehabilitation patients.

**Results:** A total of 552 patients with acute and chronic musculoskeletal conditions physical therapy treatment in the clinic over two academic calendar years. The majority of patients were treated for lower extremity and back complaints. Clinically meaningful improvements were seen for most conditions based on standardized measures of functional improvement. In addition, the DPT students report improved clinical and communication skills as a result of their inclusion as part of the
interprofessional team. They also reported other learning opportunities including administrative activities common in real world clinical settings.

**Implications:** Many clinical training programs express difficulty in obtaining quality interprofessional experiences for their students. Establishing a student run clinic at the University Health Center may be a viable option as it can provide both a unique interprofessional educational experience for students and a service to the University community.

**Author Biographies**

Lynn Fitzgerald, PT, MEd is the Director of Clinical Education and an Assistant Professor in the Department of Physical Therapy at the University of Pittsburgh. She received a BS in physical therapy from Chicago Medical School/University of Health Sciences and a Master in Educational Research Methodology from the University of Pittsburgh. Her research emphasis is on the efficacy of clinical education evaluation and outcome measures. Her clinical practice has been in pediatrics with an emphasis on early intervention.

Anthony Delitto, PT, PhD, FAPTA is the Professor and Chairman of the Department of Physical Therapy at the University of Pittsburgh, School of Health and Rehabilitation Sciences (SHRS), Associate Dean for Research, SHRS, and Vice President for Education and Research, Centers for Rehab Services. He received his BS in Physical Therapy from SUNY Buffalo, NY, his MHS in Physical Therapy and his PhD from Washington University, St. Louis, MO. Dr. Delitto has authored or co-authored over 100 peer-reviewed research papers.

Joel Stevans, DC, PhD(c) is postdoctoral fellow in Department of Physical Therapy at the University of Pittsburgh. He received his BS in Biochemistry from Cal Poly, SLO, CA, his Doctor of Chiropractic from the Los Angeles College of Chiropractic, Whittier, CA, and is currently a doctoral candidate in Rehabilitation Sciences at the University of Pittsburgh. His research emphasis is on implementation science, interprofessional care models, and health services research.

**P4-16. The Relationship Between Profession Groups and Value for IPEC Competencies in IPP**

- **Christine Conroy**, Midwestern University, Downers Grove, IL, USA
- **Judith Stoecker**, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

**Submitted abstract:**

**Background:** A major influence on IPE has been the development of the Interprofessional Education Collaboration’s competencies in 2011. There are a total of 38 individual competencies. With this many competencies it may be difficult for IPE activities to equally address all competencies. Identifying which competencies are most valued by those currently participating in IPP may give insight to their use in education. The purpose of this study is to assess healthcare teams that currently practice in an interprofessional manner to determine 1) How team members value the IPEC competencies, 2) the perceived level of IPC within the team, and 3) the relationship between level of perceived interprofessional collaboration and value placed on the IPEC competencies.

**Methods:** A sample of convenience is used to pilot this study and includes IPP teams within local hospitals and clinics. The Assessment of Interprofessional Team Collaboration Scale (AITCS) and Index of Interdisciplinary Collaboration (IIC) are used to assess perceived level of interprofessional collaboration and a Likert scale is used to determine value of the 38 competencies. A Pearson Correlation Coefficient
is used to show relationship between profession and value of competencies and between level of IPC and the competencies.

**Outcomes:** A table of Professions, their perceived collaboration and the most valued competencies will be presented.

**Conclusion:** The IPEC competency document is an important educational tool leading the selection and prioritization of content for IPP. How practicing professionals and teams view the competencies provides insight for educational decision making within the professions.

**P4-17. Interprofessional Education at Kingston General Hospital**

- **Cynthia Phillips,** Kingston General Hospital, Kingston, ON, Canada

**Submitted abstract:**
As a teaching hospital, education is at the forefront of the mandate at Kingston General Hospital (KGH). We have declared that by 2015, KGH will be a nationally recognized centre of excellence for interprofessional care and education. Interprofessional education (IPE) is the process by which two or more health professions learn with, from and about each other to increase collaboration, enhance practice and improve the overall quality of patient- and family-centred care. Our partners in the Faculty of Health Sciences at Queen’s University and St. Lawrence College have embraced interprofessional education so that together we can shape the next generation of health care providers and leaders in a way that delivers more value to patients and families.

In 2011-12 our IPE steering committee, which is comprised of representatives from a variety of health care disciplines, members of the KGH Patient and Family Advisory Council and our academic partner institutions, finalized a work plan to guide their activities as well as those of the key support teams including the IPE Events Planning and Evaluation teams.

A series of IPE events were scheduled for the fiscal year including a Simulation Olympics and patient and family-centred care presentations. Between November 2009 and April 2012, a new interprofessional collaborative practice model of care was implemented in 18 inpatient units and 33 ambulatory care areas with more than 2,200 people having attended interprofessional education sessions to learn about the model and the competencies of interprofessional collaborative practice.

The first interprofessional week at KGH in 2013 received corporate support and a number of interprofessional events are planned again for 2014. Action planning is underway to help build awareness and ten organizational competencies to support interprofessional learning across the hospital have been identified in our quest that by 2015 all education activities will be interprofessional by design.

**Author Biographies**
Cynthia Phillips has been a registered respiratory therapist at the Kingston General Hospital since 1984 including roles as clinical educator and manager. In her current role, Cynthia has managed the implementation of the Interprofessional Collaborative Practice Model of care and education and plays an ongoing role in evaluating and sustaining changes in practice. Cynthia graduated with a Bachelor of Arts in Health Studies in 2003 and a Master of Education from Queen’s University in 2007.
P4-18. Screening, Brief Intervention, and Referral to Treatment (SBIRT) of Substance Use for Interprofessional Groups of Anesthesia Students (InGAS)

- Ann M. Mitchell, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- Michael Neft, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- John M. O'Donnell, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- Kathy Puskar, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA

Submitted abstract:

**Background:** Today's patients are admitted to hospitals with multiple health conditions that are complicated by substance use. Over 23 million individuals in the U.S. are identified as needing treatment for alcohol and/or other drug problems, however only 1 in 5 receive treatment. The American College of Surgeons requires Level I and II Trauma Centers to screen for alcohol use during assessments, and the U.S. Prevention Services Task Force recommends that clinicians screen for and provide brief counseling interventions to reduce alcohol misuse. Purpose: The SBIRT-InGAS project is designed to train interprofessional groups of anesthesia students, (Student Registered Nurse Anesthetists (SRNA), Dental Anesthesia Residents, and Dental students who are taking an anesthesia elective) who work in hospitals and community-based settings to work interprofessionally using the evidence-based practice of SBIRT. This will enable these professionals to identify and provide service to patients, peers, and colleagues with substance misuse, abuse, or dependence.

**Methods:** The School of Nursing (SON) partnered with the School of Dental Medicine and the Institute for Research, Education, and Training in Addictions (IRETA) to develop a comprehensive training program including a 1.5 hour face-to-face training, a 1 hour online module, a number of simulation exercises, and an interprofessional case conference held within the clinical setting. Students complete the Alcohol and Alcohol Problems Perception Questionnaire (AAPPQ), the Drug and Drug Problems Questionnaire (DDPPQ), and a measure of SBIRT and interprofessional knowledge, before and after the training sessions.

**Results:** Several of the AAPPQ subscales significantly increased from the pre-training to post-training, including role legitimacy, role support, task-specific self-esteem, and work satisfaction. For the DDPPQ only the role legitimacy subscale significantly increased. Also, scores on the SBIRT knowledge scale and some of the interprofessional knowledge subscales increased from pre-training to post-training.

**Implications:** Results indicate that this interprofessional training in SBIRT was associated with positive changes in knowledge of SBIRT and interprofessional practice. Perceptions of competence and confidence to screen and intervene with patients using alcohol and drugs as a result of the training also increased in some areas.

P4-19. Enhancing Clinical Field Placements: An Interprofessional Consulting Team

- Nichole Ammon, Northeast Ohio Medical University, Best Practices in Schizophrenia Treatment (BeST) Center, Rootstown, OH, USA
- Sara Dugan, Northeast Ohio Medical University, Rootstown, OH, USA
- Ron Rett, National Alliance on Mental Illness (NAMI) Summit County, Akron, OH, USA
- Lon C. Herman, Northeast Ohio Medical University, Best Practices in Schizophrenia Treatment (BeST) Center, Rootstown, OH, USA

Submitted abstract:
In 2013 the Institute of Medicine’s Global Forum on Innovation in Health Professional Education indicated that community needs and practice will contribute to educational reform. They also cite an urgent need for quality interprofessional clinical field placements and learning opportunities for pre-service professionals from all health care disciplines. This presentation will demonstrate how Northeast Ohio Medical University’s Best Practices in Schizophrenia Treatment (BeST) Center is addressing this need for a “collaboration ready” workforce through its Integrated Care Technical Assistance and Consultation Team (TACT).

An interprofessional team itself, TACT is engaging community behavioral health and primary care organizations that are working collaboratively to serve indigent populations with severe mental illnesses and are also clinical field placement sites for learners from multiple health professions. TACT is designed to enhance the ability of teams and learners to become effective interprofessional collaborators and to build the capacity of integrated care organizations to provide optimal interprofessional training, education, supervision and role-modeling.

TACT is comprised of consultants from multiple health disciplines, peer support and family advocacy who share a person-centered philosophy of care. TACT members also have the unique advantage of university affiliations and real-world practice experience in relevant health care settings in Ohio. Through the process of developing its own team intelligence, TACT’s approach to consultation draws upon the individual and collective expertise of TACT members and established health and academic resources. The TACT has created a comprehensive assessment tool to identify the strengths and training needs of organizations at the beginning of consultation. Ongoing evaluation will occur through a complementary post-field placement evaluation tool. This approach allows TACT’s training and consultation to be customized to the specific needs of the interprofessional care teams and the learners completing clinical field placements at the organizations.

Author information:
Nichole E. Ammon, M.S.Ed., PCC-S, CDCA the consultant/trainer for Integrated Health Care at Northeast Ohio Medical University’s Best Practices in Schizophrenia Treatment (BeST) Center. She brings experience in creating and leading interprofessional teams in community behavioral health settings to serve as the team leader for the Integrated Care Technical Assistance and Consultation Team (TACT). In addition, she serves as the content expert and primary contact for other integrated health care initiatives at the BeST Center.

Jody M. Bell, APP, CPS is a certified peer support specialist and regional ambassador for the Ohio Empowerment Coalition and serves as peer support consultant on the Integrated Care Technical Assistance and Consultation Team (TACT). Jody’s experience ranges from NAMI Ohio peer-to-peer trainer and group facilitator to polarity practitioner of the American Polarity Therapy Association. She is committed to building a holistic approach to health, wellness and recovery.

Kathleen R. Tusaie, Ph.D., APRN, BC, Professor, University of Akron College of Health Professions, is lead faculty for the Psychiatric Nurse Practitioner track. In addition to being a column editor for Archives of Psychiatric Nursing, she has published her work in multiple journals as well as being contributing editor to a textbook, Advanced Practice Psychiatric Nursing. Dr. Tusaie is certified as a Clinical Specialist in Psychiatric Mental Health Nursing and currently practices in a multidisciplinary group.

Ron Rett, B.S. is the executive director of the National Alliance on Mental Illness (NAMI) Summit County Affiliate and was previously the director of NAMI Ohio Mental Health Housing Program. In addition to
serving as the family support representative on the TACT, Ron is a member of the BeST Center Mental Health Executive Advisor Council and consultant to the NEOMED Mental Health Medication Hotline. His experience varies from Lean Six Sigma to advocacy across Ohio.

Sara E. Dugan, Pharm.D., BCPP is an associate professor in the Department of Pharmacy Practice with the College of Pharmacy and the Department of Psychiatry with the College of Medicine at Northeast Ohio Medical University (NEOMED). She teaches neurology and psychiatry topics and serves as co-director for the Pharmacist Patient Care Experiences. Dr. Dugan is board certified in Psychiatric Pharmacy by the Board of Pharmacy Specialties and is a member of a number of state and national organizations.

P4-20. Measuring up: a critical appraisal of psychometric instruments to measure outcomes of interprofessional education in pre-qualification health sciences students

- Matthew Oates, La Trobe University, Melbourne, Victoria, Australia
- Megan Davidson, La Trobe University, Melbourne, Victoria, Australia

Submitted abstract:
Universities and other health professional training organisations are introducing a range of interprofessional education (IPE) and collaborative practice curricula to develop entry-level health professional graduates capable of working in collaborative work environments. A range of instruments have been developed to measure outcomes of IPE and collaborative practice. However, in order to provide credible information to inform the development of IPE and collaborative practice curricula, it is imperative that instruments are developed with robust psychometric properties. The purpose of this work was to review the literature on extant instruments designed to measure outcomes of IPE and collaborative practice in pre-qualification health professional students and to critically appraise their qualitative and psychometric properties against contemporary standards for educational testing. Existing inventories, search of databases and hand searches identified 138 instruments. Of these, 9 met criteria for inclusion for critical appraisal. Validity evidence available for existing instruments varies with most reporting evidence based on test content and internal structure. Reliability evidence is seldom reported. The lack of an instrument with sound psychometric properties is a fundamental barrier to the field of IPE research. Many instruments report acceptable measures of internal consistency, but most lack sufficient validity and reliability evidence to enable researchers to draw reliable and valid conclusions from collected data. The results of the critical appraisal will be presented.

Author Biographies
Matthew Oates is a Lecturer and PhD candidate at La Trobe University in Melbourne, Australia. His background is in Podiatry and prior to commencing his PhD, Matthew implemented and co-ordinated a large, multi-campus interprofessional common first year health sciences program at La Trobe. His doctoral research is focussing on the development of an instrument to measure interprofessional education outcomes in pre-qualification health professional students.

P4-21. Interprofessional Education Workshop in Stroke Rehabilitation

- Leesa Dibartola, Duquesne University, Department of Physical Therapy, Pittsburgh, PA, USA
- Elizabeth D. Deiuliis, Duquesne University, Department of Occupational Therapy, Pittsburgh, PA, USA
- Paula Turocy, Duquesne University, Department of Athletic Training, Pittsburgh, PA, USA
Submitted abstract:
The many facets of patient care require health professionals from different disciplines to work together in an effective and efficient manner. Interprofessional education (IPE) is one method of preparing students and practitioners to provide effective interprofessional collaborative practice. IPE involves two or more professionals or students learning with, from, and about one another (WHO, 2010). The purpose of this study was to examine student learning about stroke and the roles of different health disciplines in stroke care following an IPE Workshop. Participants included 334 students from the disciplines of Athletic Training, Health Management Systems, Occupational Therapy, Physical Therapy, Physician Assistant Studies, Speech-Language Pathology, Nursing, and Pharmacy, who completed an IPE Workshop. Students identified impactful conditions and asked a patient and his family related questions. In interdisciplinary groups, students developed an appropriate plan of care and identified the roles of each health professional. Pre- and post-tests measured student learning related to stroke and health professionals’ roles in stroke care. Outcomes included identification of etiologies, signs and symptoms, and treatment strategies commonly associated with patients who survived strokes, and understanding of the professional roles and responsibilities of various disciplines in stroke care. Overall, students demonstrated increased learning related to stroke and of health professionals’ roles in stroke care. The greatest learning occurred for information emphasized during the IPE Workshop rather than during pre-workshop activities that students completed independently. Although students achieved learning outcomes from the IPE Workshop, future initiatives should seek to enhance learning from pre-workshop activities and to improve measurement of students’ knowledge of health professionals’ roles. Future research may also compare the IPE Workshop to other educational approaches.

P4-22. Achieving Interprofessional Education Competencies within the Electronic Health Record using an Online and Situated Learning Intervention

Submitted abstract:
Background: Electronic health records (EHRs) are increasingly a primary form of communication between interprofessional (IP) healthcare team members for patient care. There have not been initiatives in healthcare education focused on teaching skills of interprofessional communication and coordination within the online discourse of the EHR environment.

Objectives: To develop and pilot test the impact of an EHR-based education intervention for achieving IP education competencies for students caring for a geriatrics patient in an EHR environment.

Methods: Students (N=32) from the medicine, physical therapy, physician assistant and clinical nutrition programs were placed into interprofessional (IP) teams. The intervention teams completed an interactive online module focused on communication skills for professional online discourse. The control teams participated in a truncated "placebo" module. Control and intervention teams participated in an exercise within an EHR training environment (EPIC).
The primary outcome, student team performance, was measured using a rubric based on IP education competencies. The rubric was developed based on core competencies for IP collaborative practice published by a national multisociety expert panel. Secondary outcomes included qualitative measures of learner satisfaction and self-efficacy.

**Results:** The intervention group scored higher than the control group across all IP domains measured in the rubric. The median overall rubric score for the intervention group was 76% (range 62, 82) compared with 49.5% (range 32, 54) for the control group (p=.0067). The intervention group scored particularly high in the category of addressing conflict. Despite differences in performance, both groups answered positively regarding self-efficacy for IP skills within the EHR. Problematic timing of the course emerged as a consistent theme in the responses from all learners.

**Implications:** This innovative EHR-based educational intervention for teaching IP care resulted in improved performance for students in achieving IP competencies within an EHR environment and could function as a model for other academic institutions.

**P4-23. Development of a Grading Rubric to Assess Interprofessional Pain Management Skills**

- **Jeanne Erickson,** University of Virginia, Charlottesville, VA, USA
- **Valentina Brasher,** University of Virginia, Charlottesville, VA, USA
- **Jennifer Marks,** University of Virginia, Charlottesville, VA, USA
- **John Owen,** University of Virginia, Charlottesville, VA, USA

Submitted abstract:

**Background:** Pain management remains a complex clinical challenge across settings and requires a collaborative team approach. Teaching pain management to undergraduate medical and nursing students using an interprofessional approach is recognized as an important strategy to address this challenge, and valid and reliable assessment tools are needed to document student learning outcomes.

**Objectives:** To assess the learning outcomes of an interprofessional education (IPE) pain management workshop for undergraduate medical and nursing students, we developed a grading rubric for Interprofessional Pain Management Skills (rIPPMS).

**Methods:** In consultation with clinical experts, collaborative care best practice pain management plans were developed for two unfolding case scenarios (cancer pain and post-operative pain) and used to create rIPPMS appropriate for nursing and medical students. The rIPPMS are organized into the four domains and competencies that have been proposed for interprofessional pain management (Fishman et al., 2013) and include 1) a four-level performance scale (exceeds competency to ineffective); 2) evaluative criteria for each level based on best practices, and 3) specific descriptors for each criterion. Content validity for each rIPPMS was established using physician and nurse experts who evaluated the rubric for appropriate content, clarity of criteria and descriptors, and the point distribution used to obtain a total rIPPMS score. The rIPPMS was tested by grading pain management plans generated by interprofessional small groups of medical and nursing students and revised to establish inter-rater reliability.

**Results:** The rIPPMS is a valid and reliable tool to evaluate medical and nursing student learning outcomes related to pain management in simulated clinical scenarios. These tools could be adapted to other IPE pain scenarios and to other target learners.
Implications: Valid and reliable assessment tools to evaluate the effectiveness of IPE strategies in pain management will strengthen this important content area for health professions education.

Author Biographies
Jeanne M. Erickson, PhD, RN, AOCN is an assistant professor at the University of Virginia School of Nursing. She teaches oncology nursing to undergraduate nursing students, and she is involved in interprofessional teaching and research related to end-of-life care and pain management.

Valentina Brashers MD, FACP, FNAP is a professor of nursing and attending physician at the University of Virginia Schools of Nursing and Medicine. She is the founding co-Director of the University of Virginia Center for Academic Strategic Partnerships for Interprofessional Research and Education (ASPIRE). Dr. Brashers is nationally recognized for her research and scholarship in interprofessional education and provides consultations on interprofessional education to health professions schools and care delivery organizations across the country.

Jennifer R. Marks, MD is an Associate Professor at the University of Virginia in the division of General Medicine, Geriatrics & Palliative Care. She practices general internal medicine in inpatient and outpatient settings. She participates in the clinical education of graduate and undergraduate medical trainees and won the 2013 University of Virginia School of Medicine Dean's Award for Excellence in Teaching. Research interests include clinical and interprofessional education, health literacy, and care of underserved patients.

P4-24. Certificate in Collaborative Practice for Health Professionals: A Comprehensive Continuing Interprofessional Professional Development Program

- Victoria Wood, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada
- Cristine Urquhart, Change Talk Associates, Vancouver, BC, Canada
- Deena Boeck, University of British Columbia, Vancouver, BC, Canada
- Lesley Bainbridge, University of British Columbia, College of Health Disciplines, Vancouver, BC, Canada

Submitted abstract:
Background: Interprofessional education leading to collaborative practice is a priority for regional health authorities. The College of Health Disciplines and UBC Continuing Studies have developed a new Certificate in Collaborative Practice for Health Professionals, building on the strengths of existing programs and services that have been developed and offered by both the College and Continuing Studies.

Objective: This certificate program will build capacity for interprofessional collaboration among practising health care providers through knowledge- and skills-based training that are immediately applicable in the clinical setting.

Methods: The certificate program has been developed by an interprofessional group with experience in developing and delivering interprofessional education across the health system in consultation with health practitioners, leaders, and patients. The program consists of 150 hours of learning; combines online and face-to-face delivery; involves 6 core courses, each based on one of the competency domains
identified in the Canadian Interprofessional Competency Framework; and includes a range of electives to choose from based on interest, need and desired format. Both online and classroom delivery represent a flexible learning approach designed to accommodate the needs of busy health care professionals.

**Results:** The program has been piloted with health and human service professionals in both frontline practice and leadership positions. The certificate provides learners with interprofessional collaborative practice skills and advanced-level training. The program can be tailored to individual learning needs, with a range of electives allowing participants to focus on, and build the skills and strategies most relevant to, their areas of direct practice, leadership and health education.

**Implications:** This program has the potential to build capacity for enhanced interprofessional collaboration leading, ultimately, to improved patient care.

**Biographical Information**

Victoria Wood, MA has been working in the education field, focusing on interprofessional education and collaboration, for over 6 years. She has extensive experience supporting the development and delivery of interprofessional curriculum across the continuum of learning, including university-based health science education and professional development to support collaborative practice. She has published in peer-reviewed journals and has presented on interprofessional education related topics at national and international conferences.

Cristine Urquhart, MSW, RSW, co-founder of Change Talk Associates, is passionate about working with interprofessional groups and translating research to practice to improve overall health communication. Over the past 10 years, she has trained thousands of health and social service providers across Canada in Motivational Interviewing. Cristine is a member of the international Motivational Interviewing Network of Trainers, an instructor at the University of British Columbia and a published author.

Deena Boeck, MSc, is the Associate Director of Life and Career Programs at UBC Continuing Studies. She collaborates with professional associations, local employers and UBC faculties to develop and deliver a diverse range of professional and career development programs incorporating online and in-class delivery. The creation of evidence-based, applied education in the health field has been a focus of her work both at UBC and internationally.

Lesley Bainbridge, BSR(PT), MEd, PhD is the Director, Interprofessional Education in the Faculty of Medicine and Associate Principal, College of Health Disciplines at the University of British Columbia. She is involved in several grants focusing on interprofessional education and collaborative practice, has published in peer reviewed journals on IPE and informed shared decision making and has presented on IPE related topics at national and international conferences.

Christie Newton MD, CFPC, FCFP is the Director of Continuing Professional Development for the Division of Interprofessional Education of the College of Health Disciplines at UBC. In this role she has extensive experience in developing and delivering professional development programs to enhance capacity for interprofessional collaborative practice provincially, nationally, and internationally since 2006.

- **Diane Dodd-McCue**, Virginia Commonwealth University, Department of Patient Counseling, Richmond, VA, USA
- **Dianne F. Simons**, Virginia Commonwealth University, Department of Occupational Therapy, Richmond, VA, USA
- **Emily M. Hill**, Virginia Commonwealth University, Department of Clinical Lab Sciences, Richmond, VA, USA

Submitted abstract:
**Background:** In contrast with a discipline-specific approach to professionalism, a school-level approach nurtures shared professionalism across healthcare providers, promoting enhanced interdisciplinary performance.

**Objectives:**
- Identification of a shared understanding to Achieve Healthcare Professionalism (AHP) across unique professions
- Development of AHP APP, a mobile learning app to convey shared dimensions of professionalism
- Evaluation of the feasibility of AHP APP to encourage dialogue and learning about professionalism during students’ clinical fieldwork

**Methods:** Five professionalism dimensions were identified using mixed methods research in two departments and affirmed through focus groups of clinical evaluators from nine departments in a school of allied health professions. These dimensions also were confirmed by an extensive literature review and review of professional codes of ethics. These dimensions are the foundation of AHP APP, an interactive mobile program created to nurture shared professionalism. AHP APP was developed by healthcare faculty in collaboration with biomedical engineering faculty. With AHP APP clinical fieldwork students can self-evaluate professionalism and convey their results to clinical evaluators. Clinical evaluators also assess students with this tool. The results serve as the basis of student/clinical evaluator dialogue. The AHP APP is being piloted in Fall 2013 and Spring 2014. AHP APP effectiveness in nurturing professionalism is being evaluated using mixed methods research: surveys, focus groups, and quantitative data on usage captured through a dedicated website.

**Results:** Five professionalism dimensions, generalizable across nine healthcare disciplines, are the foundation of AHP APP, a mobile app used to nurture shared professionalism across healthcare disciplines. Evaluation of AHP APP is underway, with results available in Spring 2014.

**Implications:** AHP APP’s shared dimensions of professionalism may be applicable to healthcare professions beyond those represented here and can be used to promote interprofessional competency. Its mobile delivery leverages emerging technologies in the training of new healthcare providers.

P4-26. Patient/Client Empowerment: Teaching Students this Critical Interprofessional Responsibility

- **Sylvia Langlois**, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada
- **Sharon Gabison**, University of Toronto, Toronto, ON, Canada
• **Eileen McKee**, Universiy of Toronto, Factor-Inwentash Faculty of Social Work, Toronto, ON, Canada
• **Joanne Louise**, University of Toronto, Lawrence Bloomberg Faculty of Nursing, Toronto, ON, Canada

Submitted abstract:

**Background:** The value of empowering patients/clients in clinical practice is well understood: empowerment enables individuals to take control of their health, thereby maximizing potential for well-being. As well, empowered patient/clients demonstrate increased compliance to recommendations and collaboration with team members (Hain & Sandy, 2013). What is not understood as well is the importance of an interprofessional team approach to empowerment of individuals, and the role of the patient/client as partner in development educational approaches to teach these concepts.

**Objectives:** This presentation will:
- Explore student understanding of concepts of empowerment in an interprofessional context
- Explore the value of the patient/client perspective in the development of educational material related to empowerment

**Methods:** A university curriculum team, comprised of a consumer living with HIV, faculty from Occupational Therapy, Physical Therapy, Social Work, and Nursing, and a medical student, developed a learning activity to teach the importance of an interprofessional approach to empowerment. This elective included an interactive didactic presentation highlighting concepts in patient/client empowerment, a video model of patient/client empowerment; consumer narratives highlighting the patient/client as member of the team, and case-based discussions using a lived experience of an individual living with HIV. Data collection captured knowledge acquisition, confidence with implementing empowerment strategies, and the value of empowerment of patients/clients in the health care setting. More detailed qualitative responses were collected through focus groups with students and facilitators.

**Results:** Changes in student understanding and response to empowerment as an interprofessional approach will be discussed. As well as the role of consumer involvement in empowerment curriculum development will be highlighted.

**Implications:** Patient/client empowerment is a critical topic in today’s healthcare and education settings. Development of an interprofessional approach to empowerment will enhance patient/client health outcomes. Understanding the value of consumer contributions in educational development will foster inclusion of this critical perspective.

**References**

**Author Biographies**
Sylvia Langlois is the Faculty Lead for Curriculum, Centre for Interprofessional Education, and an Assistant Professor in Occupational Science and Occupational Therapy, University of Toronto. She has been involved in the development, assessment and implementation of the requisite, competency-based IPE curriculum at the University of Toronto since 1996. She chairs various committees, including the
InterFaculty Curriculum Committee, and has lead working groups charged with the development and assessment of many core and elective learning activities.

P4-27. Linking process and outcomes: a journey in living what we teach

- **Maria Tassone**, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada
- **Sylvia Langlois**, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada
- **Mandy Lowery**, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada
- **Kathryn Parker**, Holland Bloorview Kids Rehabilitation Hospital, Toronto, ON, Canada

Submitted abstract:
**Background:** There is clarity in the organizational development literature that a balance between task and process is needed for high performing teams. Little evidence, however, is available in the interprofessional education (IPE) field on specific processes teams utilize that lead to envisioned outcomes. This presentation aims to share a robust team process within an IPE centre, coupled with reflection and evaluation over time that have led to significant impact within academia and practice.

**Objectives:**
Share an intact team process utilized within an IPE centre

1. Discuss innovative elements that can be used in diverse contexts to evaluate and sustain attention to team process
2. Explore links between process and outcome within an academic environment

**Methods:** An external facilitator was employed to assist an intact interprofessional team of leaders and educators within an academic centre to surface the process elements that led to their best outcomes. Through appreciative inquiry methods, the team determined the intention of “we live what we teach,” along with ten specific commitments and a set of concrete statements about what it would take to realize their commitments in day-to-day work and relationships, both internally and externally.

**Results:** Evaluation of the team’s capacity to ‘live what they teach’ was conducted through individual and team: (1) self-assessment using Likert scales, (2) qualitative responses to open ended questions, and (3) graphic renderings. Results indicate a shift towards greater collaborative process at the individual and team level, coupled with a time of significant growth and impact locally, nationally and internationally.

**Implications:** Prioritizing intentional process, reflection and evaluation is critical for teams engaged in leading and developing IPE within academic environments. This has the potential to influence outcomes and sustainability, and to mirror for students, faculty, healthcare providers and the external community the cultural shift towards which we are all aiming.

**Author Biographies**
Maria Tassone is the inaugural Director of the Centre for Interprofessional Education, University of Toronto (UofT), and the Senior Director, Interprofessional Education and Practice at the University Health Network. She is an Assistant Professor in the Department of Physical Therapy, Faculty of
Medicine, UoT. Maria’s leadership roles and scholarly work in education and health care have focused on the integration of practice, education and research, as well as leading change in complex systems.

Sylvia Langlois is the Faculty Lead for Curriculum, Centre for Interprofessional Education, and an Assistant Professor in Occupational Science and Occupational Therapy, University of Toronto. She has been involved in the development, assessment and implementation of the requisite, competency-based IPE curriculum at the University of Toronto since 1996. She chairs the InterFaculty Curriculum Committee and various working groups charged with the development and assessment of many core and elective learning activities.

Mandy Lowe is the Associate Director, Centre for Interprofessional Education, University of Toronto; Director of the University of Toronto’s ehpic™ (educating health professionals for interprofessional collaboration) program, a 5 day faculty/professional development certificate program; Director of Education and Professional Development at the University Health Network; and is an Assistant Professor (status appointment) in the Dept of Occupational Science and Occupational Therapy, University of Toronto.

P4-28. Creating an Interprofessional Learning Environment on a Geriatric Palliative Care Unit

- Cindy Grief, Baycrest, Toronto, ON, Canada
- Mandy Lowe, University Health Network, Toronto, ON, Canada
- Mark Rootenberg, Baycrest, Toronto, ON, Canada
- Shoshanna Campbell, Baycrest, Toronto, ON, Canada

Submitted abstract:
**Background:** Interprofessional Education facilitates a team-based, collaborative practice with benefits to patient care. To provide an optimal learning environment for health care trainees, clinical staff must themselves be familiar with the principles of interprofessional education and collaboration (IPE and IPC).

**Objectives:** To enhance the interprofessional learning climate on a geriatric palliative care unit (PCU).

Methods: Purposive sampling of clinical team consisting of volunteers, students and staff drawn from Baycrest’s PCU. 8 hour-long interprofessional education sessions were informed by needs assessment.

Baseline and post-series (8 sessions)measures included a knowledge assessment of IPE and IPC, Readiness for Interprofessional Learning Scale (RIPLS), Utrecht Work Engagement Scale (UWES-17), Attitude toward Health Care Teams Scale, and the Maslach Burnout Inventory (MBI).

Post-series 2 focus groups (volunteer and clinical team) were conducted.

**Results:** An average of 23 participants attended each session, while an average of 18 participants per session provided qualitative and quantitative post-session feedback.

Knowledge Assessment of IPE and IPC:
- 16 participants provided baseline definitions of interprofessional education and collaboration
- 10/16 reported previous experience with IPE, mostly consisting of attendance at rounds
• 25% of these participants provided a correct or partially correct definition of IPE and 44% of IPC at baseline
• 8 individuals completed post-series questionnaires, with 63% defining IPE partially or completely and 88% identifying at least one component of IPC

Focus Groups Themes
Two 1-hour focus groups lead by an independent facilitator were conducted for volunteers (n=8) and clinical staff (n=12); Dominant themes included "Valuing learning about, from and with each other", and "Clarification of roles on the team".

Implications: Baseline knowledge about interprofessional education and collaboration was low among clinical team members and improved post-education series. Positive attitudes towards interprofessional learning were reflected in the focus group themes.

Author Biographies
Cindy Grief MD, MSc is a graduate of the University of Toronto’s medical school. She is an Assistant Professor of Psychiatry at Baycrest, a geriatric facility in Toronto, Canada where she has a full time clinical practice. She is also the Medical Program Director for Baycrest’s Mood and Related Disorders Clinic. In 2012, Dr. Grief completed the Faculty of Medicine’s Centre for Faculty Development’s Education Scholars Program. This experience has fostered her interest in interprofessional education.

Mandy Lowe MSc, BSc(OT) is the Director of Education and Professional Development at the University Health Network; Associate Director, Centre for Interprofessional Education, University of Toronto; Director of the University of Toronto's ehpic (educating health professionals for interprofessional collaboration) program, a 5 day faculty/professional development certificate program, and co-Director of Synergies, a 2 day professional development program focusing on the synergies between interprofessional education and simulation.

Mark Rootenberg HBSc is a research assistant for the Psychiatry and Palliative Care Units at Baycrest and a research associate at Sunnybrook Health Sciences Centre. He is currently studying towards his Master’s in Clinical Psychology at York University in Toronto, Canada.

Shoshanna Campbell MSc, Bed is a research assistant for the Department of Psychiatry at Baycrest and currently enrolled in her Master’s in Clinical Psychology at the University of British Columbia in Vancouver, Canada.

P4-29. Interprofessional Education as a means for Enhancing Dignity on a Geriatric Palliative Care Unit
• Cindy Grief, Baycrest, Toronto, ON, Canada
• Shoshanna Campbell, Baycrest, Toronto, ON, Canada
• Mark Rootenberg, Baycrest, Toronto, ON, Canada
• Mandy Lowe, University Health Network, Toronto, ON, Canada

Submitted abstract:
Background: Chochinov et al. designed a model of dignity-conserving care as a means for enhancing individuals’ end-of-life experience(1). Threats to dignity include inadequate treatment of medical and psychological symptoms, existential distress, and social isolation. To our knowledge, this model of
dignity has not been explored among health care professionals working in palliative care.

**Objectives:** Exploration of team members’ attitudes and knowledge towards interprofessional education, collaboration and care. Exploration of the impact of education sessions on staff and volunteer perceptions of engagement and burnout.

**Methods:** A needs assessment was administered to clinical team members on Baycrest’s geriatric palliative care unit (PCU). Responses informed content of an 8-session curriculum in geriatric palliative care and mental health. Core concepts of interprofessional education (IPE) were embedded in each session, which utilized role-playing and case-based learning. Knowledge about IPE was assessed pre- and post-curriculum. Focus groups were conducted separately for staff and volunteers.

**Results:** Utilizing a conventional qualitative approach to content analysis, focus group findings demonstrated emergent themes anchored around dignity, including psychological distress, death anxiety, maintenance of pride, social support and care tenor. These themes are consistent with components of Chochinov’s model of dignity-conserving care. Participants also expressed an increased sense of team cohesion and collaboration, positive attitudes toward patient-centred care, and increased knowledge about IPE.

**Implications:** An unexpected observation to emerge from the data was the preponderance of dignity-related themes, which corresponded to Chochinov et al.’s model of dignity-conserving care. This novel curriculum in geriatric mental health and palliative care demonstrates the value of extending an existing framework for dignity beyond the context of patient care to examine its applicability to staff and volunteers on a palliative care unit.

**Author Biographies**

Cindy Grief MD, MSc is a graduate of the University of Toronto’s medical school. She is an Assistant Professor of Psychiatry at Baycrest, a geriatric facility in Toronto, Canada where she has a full time clinical practice. She is also the Medical Program Director for Baycrest’s Mood and Related Disorders Clinic. In 2012, Dr. Grief completed the Faculty of Medicine’s Centre for Faculty Development’s Education Scholars Program. This experience has fostered her interest in interprofessional education.

Mandy Lowe MSc, BSc(OT) is the Director of Education and Professional Development at the University Health Network; Associate Director, Centre for Interprofessional Education, University of Toronto; Director of the University of Toronto’s ehpic (educating health professionals for interprofessional collaboration) program, a 5 day faculty/professional development certificate program, and co-Director of Synergies, a 2 day professional development program focusing on the synergies between interprofessional education and simulation.

Mark Rootenberg HBSc is a research assistant for the Psychiatry and Palliative Care Units at Baycrest and a research associate at Sunnybrook Health Sciences Centre. He is currently studying towards his Master’s in Clinical Psychology at York University in Toronto, Canada.

Shoshanna Campbell MSc, Bed is a research assistant for the Department of Psychiatry at Baycrest and currently enrolled in her Master’s in Clinical Psychology at the University of British Columbia in Vancouver, Canada.
P4-30. Double Dose: An Interprofessional Education Curriculum Faculty Development Strategy for Facilitation

- Susan J. Wagner, University of Toronto, Toronto, ON, Canada
- Mandy Lowe, University Health Network, Toronto, ON, Canada

Submitted abstract:
**Background:** Effective interprofessional education (IPE) requires relevant content built on core competencies that is taught by knowledgeable and skillful educators and then assessed and evaluated. Key to the education process is the educator or facilitator and their skill in facilitating interprofessional groups. As part of a large longitudinal, innovative IPE curriculum, a two-pronged faculty development strategy for facilitation was designed to engage academic and clinical faculty, develop competencies and build capacity.

**Objectives:**
- Describe an example of a competency-based IPE curriculum
- Describe an innovative IPE faculty development strategy for facilitation
- Apply strategies and lessons learning to their own contexts

**Methods:** Interested participants engage in a half-day interactive workshop that is given several times annually. This workshop acts as an introduction to facilitation and focuses on defining IPE facilitation, key foundational theories and concepts; describing IPE facilitation competencies using a unique self-assessment tool; applying these to common facilitator situations and developing a learning plan for ongoing development.

Following this, faculty volunteer for facilitation experiences within the IPE curriculum where they participate in a second facilitator faculty development workshop specific to a learning activity. In this way, they learn the design, goals, objectives and methods employed in the session, including those for facilitating, and apply their learning from the introductory workshop.

**Results:** Both qualitative and quantitative evaluation data are very positive for the introductory workshop and subsequent specific learning activity workshops. Both academic and clinical faculty find that this faculty development meets and often exceeds their expectations.

**Implications:** This faculty development strategy demonstrates that a double dose or two-pronged strategy for faculty development in IPE facilitation is effective. This has critical implications for all institutions engaging and developing a competent cadre of facilitators for an IPE curriculum to enable quality interprofessional facilitation and learning.

**Author Biographies**
Susan J. Wagner, B.Sc. (SPA), M.Sc.(CD), Reg. CASLPO, S-LP(C) is the Senior Coordinator of Clinical Education and Director of Continuing Education, Department of Speech-Language Pathology, Faculty of Medicine, University of Toronto. As the inaugural Faculty Lead – Curriculum at the Centre for IPE she led the development and implementation of a requisite IPE curriculum. This involved creation and integration of core competencies, learning activities, points for interprofessional education system (PIPEs), assessment, evaluation and faculty leadership. An IPE student award is named in her honour.
Mandy Lowe, B.Sc. (OT), M.Ed. is the Director of Education and Professional Development, University Health Network and the Associate Director for the Centre for Interprofessional Education, University of Toronto (UT). She holds a status appointment as Assistant Professor in the Department of Occupational Science and Occupational Therapy, Faculty of Medicine, UT. She is strongly committed to interprofessional education, collaboration and knowledge translation and has been involved in all phases of IPE including undergraduate, graduate and post-graduate education.

P4-31. Collaborative Academic Practice Innovation and Research Fellowship Program: Building Interprofessional Leadership Capacity at the Point of Care

- Carolyn Plummer, University Health Network, Toronto, ON, Canada
- Paula Rowland, University Health Network, Toronto, ON, Canada

Submitted abstract:
Developing leadership capacity among healthcare professionals (HCPs) at the point of care is critical to fostering interprofessional patient-centered care and collaboration, facilitating quality improvement, promoting succession planning, addressing quality of work life, and inspiring innovation. A Fellowship program was implemented at a large academic hospital, with the aim of fostering interprofessional leadership capacity and innovation. It was developed based on research evidence that demonstrates the positive effect of protected professional development time on quality of care, leadership capacity, interprofessional collaboration, and employee engagement.

The Fellowship provides annual opportunities for HCPs to lead interprofessional innovative quality improvement projects, to engage in ongoing dialogue together about leadership, and to contribute to improving care through leadership, interprofessional collaboration, and innovation.

Potential participants submit project proposals, which are reviewed and selected based on scientific merit and feasibility by a committee comprised of leaders, researchers, and quality improvement experts.

Participants receive two paid days per week for six months, and support from organizational leaders. This protected time is used for project completion, and for ongoing learning about interprofessional leadership, change management, communication and knowledge transfer strategies, and other topics.

The Fellowship was evaluated to understand its impact on leadership capacity, interprofessional collaboration, sustainability, employee engagement, and patient care.

All Fellowship projects were successfully implemented. Examples include an oral care program for high-risk medical patients; establishment of a palliative care resource role; and a multi-faceted nutrition program for high-risk cardiovascular patients.

Evaluation results have demonstrated improvements in patient care, sustained quality improvement changes, increased leadership activity among participants, and increased interprofessional collaboration.

HCPs at the point of care have a wealth of innovative and sustainable ideas for improving care and when supported to do so are able to make significant contributions across organizations. The success of this program demonstrates its potential to be implemented in other healthcare settings.

Author Biographies
Carolyn Plummer is Senior Manager of Innovation for Collaborative Academic Practice at University Health Network (UHN) in Toronto, Canada, and holds a clinical appointment at the University of
Toronto. She leads an innovation strategy, engaging staff and leaders across and beyond UHN to promote innovative initiatives that enhance collaborative practice, education, research, and interprofessional leadership within the framework of patient-centered care. Carolyn is currently completing a doctoral program at Fielding Graduate University in California, USA.

**P4-32. Tracing Patient Centered Care Citations Across the Professions over the Past 67 Years**

- **Paula Rowland**, University of Toronto, Toronto, ON, Canada
- **Simon Kitto**, University of Toronto, Continuing Professional Development, Toronto, ON, Canada

**Submitted abstract:**

**Background.** Patient centered care is considered a core value across many of the health professions. Increasingly, patient centered care is also considered an essential element of quality within health systems. The term itself remains somewhat ambiguous, taking on different meanings in different professions and different times. Understanding how the concept is deployed aids in the necessary conversation about what constitutes patient centered care and how we might organize ourselves to achieve it.

**Objectives.** This study involved a citation analysis of published literature available through MedLine and CINAHL databases from 1946 until 2013.

**Methods.** Search terms of “patient centered”, “person centered”, “client centered”, “relational care” (inclusive of the alternate spellings of “centered”) were used to search MedLine and CINAHL. All citations were downloaded into reference management software (EndNote). Citations were limited to English and all duplicates were removed, resulting in a total of approximately 20,000 citations. Citations were then exported to Excel where journals were categorized according to profession (e.g. medicine, nursing), substantive topic area (e.g. health administration/health services research), or patient group (e.g. pediatric, mental health, specific illness). Citations were graphed according to year of publication and category of journal. Separate graphs were constructed for the distinct terms of “patient”, “person”, “client”, “consumer”, and “relational” centered care.

**Results.** There is a substantial increase in publications mapped to the subject heading “patient centered care” in the early 2000s. While each of the professional journals shares this temporal trend, the most striking increase in publications is within the fields of health administration and health service research.

**Implications.** These results are examined in the light of sociological theories related to social movements in health, suggesting that the concept of patient centered care is taking on new meanings over time and is reflective of larger social movements at play in our current context.

**P4-33. Educating Interprofessional Teams to Support Point-of-Care Research in Health Systems**

- **Paula Rowland**, University of Toronto, Toronto, ON, Canada
- **Helen Kelly**, University Health Network, Toronto, ON, Canada
- **Brenda Ridley**, University Health Network, Toronto, ON, Canada

**Submitted abstract:**

**Background.** Point-of-care research activities refer to research that is directed by the questions and problems encountered by point-of-care clinicians. However, while clinicians have unique insight into
point-of-care questions, this does not suggest that all clinicians are equally prepared or supported to lead research activities. Further, much of point-of-care research is most appropriately addressed through interprofessional teams. Differential research competencies within interprofessional teams may impact opportunities for collaboration. In 2013, University Health Network (UHN) in Toronto developed a comprehensive program designed to support point-of-care research within and across 12 health professions. One element of this program is the Internal Grant Competition.

**Objectives.** The Internal Grant Competition provides opportunities for mentorship and consultation from Research Leaders, peer review, and the opportunity to compete for funding for projects. Novice clinician-researchers also have the opportunity to participate in curriculum related to research design and proposal development. The curriculum consists of four in-person sessions, structured as a mix of (a) large group didactic lectures and (b) team-based learning spread over four months. Mentoring of the teams by Research Leaders complements the sessions. The output of the curriculum is a complete research proposal. Through this process, participants gain knowledge and skills in research design. Novice teams that are successful in the grant competition receive mentoring throughout their research project.

**Methods.** Pilot evaluation of the Internal Grant Competition includes: description of applicants, description of research projects implemented and, evaluation of the curriculum. Future evaluation will include outcomes and impacts of the program.

**Results.** Early evaluation results demonstrate that the program is well received and highly valued by participants and stakeholders.

**Implications.** The Internal Grant Competition works at the intersections of education, practice, and research, contributing to excellence in care through professional and interprofessional collaboration, while advancing each clinical profession.

**P4-35. Integrating Interprofessional Education With Uniprofessional Curricula: Strategies and Learnings from Speech-Language Pathology**

- **Susan J. Wagner**, University of Toronto, Toronto, ON, Canada

**Submitted abstract:**

**Background:** The University of Toronto developed a competency-based longitudinal IPE curriculum for eleven of its health science professional programs that is ideally integrated within the uniprofessional curricula of each faculty/department. However, challenges are present in effectively integrating two curricula to optimize learning and the development of competencies for effective collaboration. The Department of Speech-Language Pathology is employing effective strategies and methods that promote such integration.

**Objectives:** Participants will be able to:

- Describe an example of a competency-based IPE curriculum
- Describe key strategies, methods and learnings for integration of the IPE curriculum with a uniprofessional curriculum in speech-language pathology
- Apply this knowledge to their own contexts

**Methods:** An overview of the University of Toronto IPE curriculum and the speech-language pathology
Results: The impact of the curriculum integration after nine years, based on student self-assessment and perception as well as faculty, clinical educator and alumni feedback, is positive.

Implications: This effective model of IPE curriculum integration with a uniprofessional curriculum has application to other health science professions. Successful curriculum integration is integral to developing collaborative practice-ready clinicians.

Author Biographies
Susan J. Wagner, B.Sc. (SPA), M.Sc.(CD), Reg. CASLPO, S-LP(C) is the Senior Coordinator of Clinical Education and Director of Continuing Education, Department of Speech-Language Pathology, Faculty of Medicine, University of Toronto. As the inaugural Faculty Lead – Curriculum at the Centre for IPE she led the development and implementation of a requisite IPE curriculum. This involved creation and integration of core competencies, learning activities, points for interprofessional education system (PIPEs), assessment, evaluation and faculty leadership. An IPE student award is named in her honour.

P4-36. Interprofessional Education during an International Medical Mission
- Karen Arscott, The Commonwealth Medical College, Scranton, PA, USA

Submitted abstract:
The goal of this IPE exercise is to invite both students and faculty from various healthcare disciplines, to collaboratively address the health care needs of the people of Haiti. It is suggested that taking providers out of their individual comfort zones or "silos" and placing them in an unfamiliar setting would allow the health care team a greater level of collaboration. There have been two interprofessional medical missions to Haiti to date.

All four previously defined Core Competencies were exemplified in these interprofessional medical missions: Values/Ethics for Interprofessional practice; Roles/Responsibilities; Interprofessional Communication; and Teams/Teamwork. These competencies take on a new meaning when a health care team travels to a foreign clinic caring for patients who do not speak the same language. The healthcare availability in Haiti is opposite to what is common practice in the USA. Caring for patients in remote areas with limited supplies mandates collegiality which then fosters a deeper understanding and respect for the knowledge and ability of fellow health care team members.

Students are able to witness the professors modeling interprofessional collaboration, working toward the common goal, which is to maximize the health and well-being of the patients. It is an opportunity to observe firsthand the "virtues in common" approach as defined by the Interprofessional Professionalism Collaborative (2010): "Interprofessional professionalism" as: "Consistent demonstration of core values evidenced by professionals working together, aspiring to and wisely applying principles of altruism, excellence, caring, ethics, respect, communication, [and] accountability to achieve optimal health and wellness in individuals and communities".

The global healthcare community should be taken into consideration when teaching IPE and therefore an additional goal/requirement would be inclusion of interprofessional education with foreign healthcare providers. This project covers all of the previously defined Core Competencies of IPE with an
added competency of collaborative healthcare across nations and cultures.

**Author Biographies**

Karen E. Arscott, D.O., M.Sc. is a founder/leader in IPE with the North East/Central Interprofessional Education Coalition (NECIPEC) since the program’s inception fall 2007. While program director for the Marywood University PA Program Dr. Arscott was the coordinator for all IPE events at Marywood University. She is the Scranton Region Coordinator for NECIPEC. Now Associate Professor at The Commonwealth Medical College (TCMC) she is part of the IPE team which includes simulation. As faculty supervisor for the Global Health Society organization at TCMC she is creating several IPE Global Health experiences for medical students at all levels of training.

**P4-37. A Required Interprofessional Clerkship for Fourth Year Medical Students at The Commonwealth Medical College.**

- **Karen Arscott**, The Commonwealth Medical College, Scranton, PA, USA
- **Kathleen Provinzano**, Drexel University, Philadelphia, PA, USA
- **Edward Foote**, Wilkes University, Wilkes-Barre, PA, USA

**Submitted abstract:**

The Commonwealth Medical College (TCMC) requires students to complete a fourth year interprofessional rotation (MD 915). MD 915 is a two-week, pass/fail clerkship rotation. Four of the five course objectives in MD 915 are related to the IPE Core Competencies of values/ethics, roles/responsibilities, interprofessional communication, and teamwork. The fifth objective is related to professionalism.

The purpose of this study is to explore the IPE experiences of 4th year medical students completing the MD 915 clerkship rotation. Clinical sites using interprofessional patient care teams were recruited. The twelve participating sites include primary care, drug and alcohol addiction treatment, physical medicine and rehabilitation, and geriatric care. Students began rotations in summer 2013 and are required to complete four MD 915 course assignments documenting their direct patient care interactions with non-physician healthcare workers and their participation in team-based meetings. In addition, students complete a post-clerkship survey and final reflection.

To date, twelve of 65 MD 4 students have completed the MD 915 clerkship rotation. On average, students interacted with seven different healthcare disciplines and 60-100% of the time was spent with non-physician practitioners. Preliminary findings suggest not only the importance of IPE but also an appreciation by MD 4 students of participatory, interprofessional experiences during medical training.

**Author Biographies**

Karen E. Arscott, D.O., M.Sc.: Associate Professor in Clinical Sciences at The Commonwealth Medical College. Dr. Arscott is a founder/leader in the Northeastern/central Pennsylvania Interprofessional Education Coalition (NECPA IPEC).

Kathleen Provinzano, PhD.: Assistant Professor and academic coordinator for leadership programs in the graduate education division. Dr. Provinzano also serves as an adjunct faculty member for Wilkes University education department.

Edward F. Foote, PharmD: Associate Professor of Pharmacy Practice at Wilkes University. Dr. Foote has
become a leader of interprofessional education (IPE) with Northeastern/central Pennsylvania Interprofessional Education Coalition (NECPA IPEC) having spent a sabbatical at The Commonwealth Medical College during the 2012-2013 academic year creating curriculum.

P4-38. A novel health care professional-shadowing initiative for senior medical students

- Daniel Shafran, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada
- Lisa Richardson, University of Toronto, HoPingKong Centre for Excellence in Education and Practice, Toronto, ON, Canada
- Mark Bonta, University of Toronto, Centre for Interprofessional Education, Toronto, ON, Canada

Submitted abstract:

**Background:** Interprofessional collaboration is vital to patient care. However, many medical students interact poorly with nurses during clinical clerkships, and less is known about their relationships with other health care professionals (HCPs). Three instances of “nurse shadowing” interprofessional education (IPE) initiatives for first-year medical students have been published. Similar programs for senior medical students have not been studied, and none have included non-nurse HCPs.

**Objectives:** We conducted a novel educational initiative wherein senior medical students shadowed a variety of HCPs to determine whether such an intervention might improve interprofessional collaboration in clerkship and beyond.

**Methods:** All third-year University of Toronto medical students were assigned to shadow a HCP from one of 20 professions for a two-hour period. Liker-like rating scales and qualitative feedback from post-experience surveys were analyzed.

**Results:** A large majority (92.3%) of the 207 respondents found the experience to be a valuable component of their medical education, and 90.4% reported an improved understanding of the roles and responsibilities of all HCPs shadowed. Three quarters (74.9%) of students felt better equipped to communicate with HCPs. Changes in attitude were also noted: 84.0% felt more open to learning from HCPs and 85.5% felt a greater respect for their contribution to the healthcare team. Qualitative feedback expanded on these findings and revealed students’ desire for increased opportunities for similar initiatives.

**Implications:** Currently, there is a paucity of educational initiatives to help medical students understand the roles of other HCPs. Simple analysis of this innovative IPE intervention suggests it benefits senior medical students and other HCPs and may lead to improved collaboration in and beyond clerkship. We suggest other medical schools may want to pilot similar IPE activities. Similar initiatives at the postgraduate level should also be considered.

P4-39. Using university-jail partnership to create opportunities for Interprofessional Team-based Learning

- Kerry Dunn, University of New England, School of Social Work, Portland, ME, USA
- Shelley Cohen Konrad, University of New England, Portland, ME, USA

Submitted abstract:
This paper describes team-based learning that takes place inside a county jail. The University of New England (UNE) - Cumberland County Jail (CCJ) Collaboration grew out of an “Inside-Out” model class first taught at CCJ in the summer of 2012. Student and inmates members of the class created the Collaboration in order continue finding ways to employ university resources to address service needs at the jail. The Collaboration reached out to other health professions in order to broaden the knowledge and skills available for problem solving at the jail. In Fall 2012 and Spring 2013, three activities were developed and implemented by interprofessional teams made up of social work, nursing, physician assistant, physical therapy, occupational therapy: Exercise training, Health education, and Support groups. All three projects are continuing in AY2013-14. Each team works closely with inmate advisors to develop their projects, requiring students not only to collaborate with other professions but also with service users. Students participate in the collaboration either as a service-learning project, as part of a campus-based course with a service-learning component, or as an independent study. The UNE-CCJ Collaboration has become a much sought after opportunity.

An exploratory study is underway to assess student-learning outcomes related to IPE values and the jail experience. The study addresses transformational student learning in multiple domains including: (1) what it means to be incarcerated and culturally marginalized; (2) health and social disparities that permeate prison and post-release life; (3) the strengths and vulnerabilities of people who become incarcerated; (4) self awareness and assumptive worlds; and (5) the value and agency of learning and working in teams. We will describe these and other benefits as well as the challenges of student-led, team-based work at the jail.

P4-40. Campus to Community Partnerships: Building Interprofessional Collaborative Practice Learning Experiences

- Shelley Cohen Konrad, University of New England, Portland, ME, USA
- Daniel Mickool, University of New England, Portland, ME, USA
- Andrea Abrell, Maine Dartmouth Family Medicine Institute, Augusta, ME, USA
- Susan St. Pierre, University of New England, Portland, ME, USA

Submitted abstract:

**Background:** The University of New England (UNE) has a long history of academic programming aligned with interprofessional competencies but it does not house an academic health center. To close the gap between health education and practice settings UNE faculty collaborated with preceptors and practitioners from a family-based outpatient clinic setting. Together they designed, implemented, and evaluated an interprofessional collaborative practice rotation that met the needs of students, patients, populations and the community health system.

**Objectives:** Objectives included the following: to develop a mutually beneficial relationship between UNE as an educational institution and the community-based practice site serving the needs of complex patients and underserved populations; to simultaneously educate students across health professions in interprofessional team-based and discipline-specific competencies and skills.

**Methods:** Medical and pharmacy students worked with interprofessional preceptors and mentors throughout their rotations. Teaching methods included shared patient panels, common didactics, collaborative visits, a shared final assignment, and reflective journaling. Students were introduced to other's roles and expertise; to collaborative practice skills; and to social determinants affecting patient
health and access to services. Students’ attitudes and perceptions were measured.

**Results:** Collaborating partners found common ground that secured meaningful rotations for students. They learned new models that informed changes in their practice culture. Preliminary findings indicate that student attitudes towards other professions transformed in positive and meaningful ways and qualitative reporting describes detection and avoidance of medical errors by way of effective, patient-centered cross-professional communication.

**Implications:** The campus to community partnership, though difficult at times, provided encouragement for working directly with community partners to develop relevant, meaningful, and efficacious shared learning experiences for students in community practice settings. UNE will host a collaborative practice summit in spring 2014 to further develop collaborative learning sites across Maine.

**P4-41. Integrated Experiential Continuing Education to Enhance Collaborative Practice**

- **Sharla King,** University of Alberta, Health Sciences Education and Research Commons, Edmonton, AB, Canada
- **Tara Hatch,** University of Alberta, Edmonton, AB, Canada
- **Joe MacPherson,** University of Alberta, Edmonton, AB, Canada
- **Jana Lait,** Workforce Research and Evaluation, Alberta Health Services, Calgary, AB, Canada

**Submitted abstract:**

**Background:** Continuing education opportunities for health providers are critical for the ongoing development and enhancement of skills and knowledge, particularly in collaborative practice. Adopting an integrated approach to workplace education, with foci on a system and micro level, will best develop the skills necessary to work in the complex, dynamic health system (Kuipers et al, 2013).

**Objectives:** The purpose of the research was to determine the effectiveness of the experiential learning program to support the implementation of interprofessional care processes into two acute care sites.

**Methods:** An experiential learning program was implemented at two hospitals (one urban, one rural) for health care providers to learn and practice three care processes: interprofessional rapid rounds, interprofessional team assessment, and nursing assignment of care. The learning program utilized simulation scenarios, ‘just-in-time’ learning, communication skills practice, reflective practice activities in self-directed and group learning environments. The goal was to integrate the educational experiences directly into the workplace and reducing the amount of training time required away from the unit. On-site staff worked with project educators to guide the development and implementation of the education program. Evaluation included determining the impact of the education program and enhancement of interprofessional competencies involving providers at four units (two implementation units and two control units) completing questionnaires and participating in interviews at two time points.

**Results:** Outcomes from the provider questionnaires and interviews will be reported. Recommendations for integrating education into the workplace will be shared.

**Implications:** Determining contextually relevant, effective and efficient approaches to integrate continuing education opportunities directly into the workplace is critical to ensure health providers develop and enhance the collaborative skills necessary to deliver quality care.

**Author Biographies**
Dr. Sharla King is an Assistant Professor in the Department of Educational Psychology and Program Director for the MEd in Health Sciences Education program, Faculty of Education and the Director of the Health Sciences Education and Research Commons at the University of Alberta. Dr. King has worked in the area of interprofessional education for the past 10 years. Her research interests relate to interprofessional education and student team interactions, blended learning and simulation education.

Tara Hatch - As the Interprofessional Practice Manager with the Health Sciences Education and Research Commons, Tara coordinates an elective course in which individual students are matched to a clinical site and act as a catalyst for the clinical team to explore their team process. She also contributes to the development and implementation of other interprofessional education projects across the health sciences at the University of Alberta. Prior to joining HSERC in 2009, she worked as a social worker in a variety of settings across the care continuum.

Joe MacPherson is a Simulation Specialist for HSERC (Health Sciences Education and Research Commons) at the University of Alberta. He uses his experience as a respiratory therapist (RT) and RT clinical instructor to create interprofessional simulation opportunities for health science students and continuing professional learners. When not running or debriefing scenarios Joe has an interest in promoting and researching futuristic collaborative clinical environments in which students will one day practice!

**P4-42. Simulation Blitz Impacts Collaborative Practice Readiness**
- **Sharla King**, University of Alberta, Health Sciences Education and Research Commons, Edmonton, AB, Canada
- **Dawn Ansell**, NorQuest College, Edmonton, AB, Canada
- **Sam Magus**, Northern Alberta Institute of Technology, Edmonton, AB, Canada

Submitted abstract:
**Background:** Simulation is a learning strategy increasingly used to support the development of interprofessional competencies in pre-licensure students. However, the use and longer-term impact of interprofessional simulations with students from certificate, diploma, and degree granting programs has not been examined.

**Objectives:** The purpose of the research was to determine the longer term impact of a co-curricular interprofessional simulation event with pre-licensure students from four educational institutions.

**Methods:** Save Stan is a one day co-curricular, interprofessional simulation event held once a year for students from four partnering educational institutions. Students are assigned to participate in a variety of simulations ranging from palliative care, continuing care, community mental health and emergency medicine. Three months after the event, semi-structured telephone surveys were conducted with students who consented to be contacted. Data analysis was completed using Merriam’s (2009) basic qualitative inquiry method. Two major questions were used for the analysis: 1) What did the students
report learning?; and 2) What have they done differently in their clinical work because of participating in the event? Data relevant to these questions was separated out and analyzed using an inductive analytic approach within each question.

Results: Thirty-five students were interviewed. Students reported learning a) health team skills, such as communication, teamwork and leadership in teams; b) scopes of practice and roles of other disciplines, in addition to their own; c) perspectives of other disciplines; d) key team behaviours and dynamics that support effective teamwork; e) personal/professional identity development, and f) a new respect and readiness for interprofessional learning and collaborative practice. Students reported being more confident working with others in clinical placements, more focused on clear communication, and more apt to ask for help.

Implications: A one day interprofessional simulation event had positive impacts on students knowledge of interprofessionalism and increased their confidence to practice collaboratively.

Author Biographies
Dr. Sharla King is an Assistant Professor in the Department of Educational Psychology and Program Director for the MEd in Health Sciences Education program, Faculty of Education and the Director of the Health Sciences Education and Research Commons at the University of Alberta. Dr. King has worked in the area of interprofessional education for the past 10 years. Her research interests relate to interprofessional education and student team interactions, blended learning and simulation education.

Dawn Ansell RN BN has been an educator of the front line certificate and diploma health care team members at a community college for nearly 25 years. She has spent the last six years as a champion of simulation and interdisciplinary education as the Head of the Interdisciplinary Simulation Centre at NorQuest College in Edmonton, AB Canada. Dawn is passionate about simulation, interdisciplinary teams and education.

Sam Magus is a clinical instructor in the Respiratory Therapy program at NAIT in Edmonton. She is also the Preceptor Education Lead for the School of Health Sciences. Sam has been instrumental in the development of interprofessional education practice for health students and preceptors. Sam is passionate about fostering the student preceptor relationship through simulation and by teaching collaborative practice.

P4-43. Exploring the Development and Sustainability of a Student-Led Interprofessional University Clinic in the Context of Communities of Practice

- Daniel O’Brien, Auckland University of Technology, Auckland, New Zealand
- Jennie Swann, Auckland University of Technology, Auckland, New Zealand
- Naomi Heap, Auckland University of Technology, Auckland, New Zealand

Abstract submitted:

Background: Interprofessional collaborative practice (IPCP) is a key factor in the effective delivery of health care. To ensure that IPCP can occur it is essential that emerging health care professionals have the skills necessary to work in this manner. It is important that students receive education on interprofessional practice and have opportunities to practice in an interprofessional manner as part of their pre-registration education. One way of facilitating these interprofessional opportunities is through interprofessional university-based clinical placements. One clinic that offers placements of this nature is Akoranga Integrated Health. The clinic is based at AUT University in Auckland, New Zealand. Students
placed in the clinic participate in combined treatment sessions (where two or more professions are represented at a single patient appointment) and interprofessional tutorials. Currently the body of literature surrounding the development and sustainable management of student-led interprofessional university clinics is limited. Further, there is even less literature that explains how theory and philosophy are used to underpin the development and sustainable management of such clinics.

**Objective:** To explore to what extent the Communities of Practice (CoP) model could explain the processes used to develop and maintain a student-led interprofessional university clinic that facilitates IPCP.

**Methods:** A procedure of mapping out processes to determine the key milestones during the development of IPCP initiatives was engaged in, the findings were then examined for congruence with the key concepts contained in Wenger’s model of CoP.

**Results:** This study indicated that there was a close match between the university clinic’s processes for the facilitation of IPCP and the concepts of CoP. Furthermore, the CoP model could be used to inform the sustainability of IPCP in the clinic.

**Implications:** There is potential for the CoP model to be used to guide the processes needed to develop and sustain a student-led interprofessional clinic.

**P4-44. A Novel Financial Education Program in Single Women of Low-Income and Their Children**

- **Kathleen Packard,** Creighton University, Omaha, NE, USA
- **Ann Ryan-Haddad,** Creighton University, Omaha, NE, USA
- **Nicole White,** Creighton University, Omaha, NE, USA

**Submitted abstract:**
Literature suggests an association between poverty, gender, and health. The novel Financial Success Program (FSP) provides education and support to an underserved population through a unique interprofessional collaboration. The FSP focuses on three core components: an outstanding trainer, one-on-one financial coaching, and an easy to use money management system. Team members include a social worker from the college of business administration, three pharmacists, an occupational therapist, a nurse, and three physical therapists.

This study assessed the effect of the FSP on health and quality of life in participants and their children. From 2011-2012, 36 women and 28 children were enrolled in the study. Measurements of cardiovascular risk, quality of life, and perceived hopefulness were assessed pre- and post-year-long intervention.

In addition to improvements in financial outcomes, there were significant reductions in fast food consumption in both women and children; 2.4±1.7 weekly meals reduced to 1.5±1.1, p=0.010 and 1.9±1.4 weekly meals reduced to 1.4±1.3, p=0.03, respectively. There were also trends towards increased exercise in mothers, 120.0±237.0 weekly minutes pre-intervention and 184.2±404.2 minutes post-intervention, p=0.35. Over 30% of mothers experienced weight loss, 52% a reduction in BMI, and 41% a reduction in body fat percentage. Likewise, many children experienced reductions in BMI and BMI percentile. Quality of life in mothers improved for all domains assessed. This was statistically
significant for domain 1 physical health (pre-21.2±3.0 and post-23.3±3.0, p=.001) and domain 4 environment (pre-26.6±4.8 and post-30.1±5.6, p<.001). Likewise, Trait Hope Scale scores significantly improved for mothers (pre-48.7±7.9 and post-52.7±8.5, p=.01)

This study is the first to report the positive health effects of financial education in low-income single mothers. When designing multifaceted community-based cardiovascular risk reduction programs, financial stress should be addressed through education. This interprofessional model serves as a framework for addressing public health needs in a financially stressed population.

Author Biographies
Kathleen Packard PharmD, MS, BCPS a cardiovascular research fellowship at the Creighton Cardiac Center. She was the Director of Research for the Nebraska Heart Institute and then returned to Creighton as faculty in the School of Pharmacy. She provides clinical services at Bryan Health Medical Center and at Bryan Health LifePointe. She teaches cardiovascular pharmacotherapy and conducts research in areas of cardiovascular therapeutics, primary prevention, and interprofessional education.

Ann Ryan-Haddad PharmD serves as the Director of the Office of Interprofessional Scholarship, Service and Education for Creighton University's School of Pharmacy and Health Professions. She offers an elective clinical pharmacy rotation in Community Health Engagement. Her areas of interest are interprofessional education, health promotion, and community engagement.

Nicole White PharmD - After pharmacy school, Dr. White completed a pharmacy practice residency at Creighton University in the outpatient setting. She currently serves as an assistant professor of pharmacy practice at Creighton University and provides clinical services in a worksite chronic disease management program. She precepts students on an elective ambulatory rotation and teaches diabetes care for pharmacists. Her research interests include lifestyle medicine, corporate wellness, and interprofessional care and education.

P4-45. Fall Risk Assessments: Unique Opportunities for Interprofessional Health Science Students

- **Ann Ryan Haddad**, Creighton University, School of Pharmacy and Health Professions, Omaha, NE, USA
- **Kelli Coover**, Creighton University, School of Pharmacy and Health Professions, Omaha, NE, USA
- **Lisa Black**, Creighton University, School of Pharmacy and Health Professions, Omaha, NE, USA
- **Judy Gale**, Creighton University, School of Pharmacy and Health Professions, Omaha, NE, USA
- **Kathy Flecky**, Creighton University, School of Pharmacy and Health Professions, Omaha, NE, USA

Submitted abstract:
**Background:** One of the new Healthy People 2020 objective goals is a focus on improving the “health, function, and quality of life for older adults.”1 To improve quality of life, it is necessary to reduce functional decline, due to chronic illness or injury, which may limit activities of daily living or require transition from independent living. Injury prevention, specifically fall prevention, is important to improve function and quality of life.

**Objectives:**
- Describe the development and implementation of the fall risk assessment program
- Summarize the impact of a fall risk assessment program on students and seniors
• Discuss lessons learned and best practices

Methods: The program was developed in 2011 with students and faculty from four health disciplines working in teams to assess seniors for potential fall risk. Students performed discipline-specific assessments to evaluate fall risk and then shared their findings with their teams. Team recommendations were detailed in fall risk report cards and shared with residents. Sustainability of the model has been ensured by incorporating the planning and oversight through the school’s Office of Interprofessional Scholarship, Service and Education.

Implications: This interprofessional fall risk assessment program provides health science students the opportunity to apply their clinical assessment and problem-solving skills as well as enhance their communication and interpersonal skills. Senior residents also receive recommendations to potentially reduce their fall risk.

Results: The model has been adapted for a variety of senior care settings. Throughout the fall risk assessment program, 260 faculty and students have provided assessments to 145 seniors. More than 2300 hours of service have been provided by faculty and students. More detailed information regarding recommendations will be shared at the conference.

Author Biographies
Ann Ryan Haddad, Pharm.D. serves as the Director of the Office of Interprofessional Scholarship, Service and Education and she is an Associate Professor in the Pharmacy Practice Department at Creighton University School of Pharmacy and Health Professions. Her clinical experience includes consultant pharmacy practice in ambulatory geriatric and long-term care. She offers a clinical rotation in Community Health Engagement. Her areas of interest are interprofessional education, health promotion, and community engagement.

Kelli L. Coover, Pharm.D., FASCP, CGP is an Associate Professor of Pharmacy Practice and Assistant Director of Experiential Education at Creighton University School of Pharmacy and Health Professions. She is the instructor for the Introductory Pharmacy Practice Experience (IPPE) course series and provides the geriatric lectures in several didactic courses. Her clinical experience includes community, long-term care, and consultant pharmacy practice. Her areas of interest include medication therapy management, interprofessional education and health promotion.

P4-46. The Interprofessional Pediatric Advocacy Program

• Natalie Bachynsky, The University of Texas Medical Branch, School of Nursing, Galveston, TX, USA
• Mary O’Keefe, The University of Texas Medical Branch, School of Nursing, Galveston, TX, USA

Submitted abstract:
Background: There were 336 children with disabilities identified in Texas Region 6 Family Based Safety Services program (a division of Child Protective Services), with 148 of these children designated as medically fragile. There was only one nurse consultant responsible for monitoring the safety and access to quality care of the medically fragile children.

Objectives: The purpose of Interprofessional Pediatric Advocacy Program (IPAP) was to create an interprofessional team to deliver quality health care (QHC) to MFC under the jurisdiction of Child Protective
Services’ (CPS) Family Based Safety Services Program (FBSS). Goal 1 was to establish team building between healthcare professionals during clinical experiences. Goal 2 was to provide QHC to families of MFC in the home setting.

**Methods:** The interprofessional collaboration was developed utilizing an electronic distance education program as a resource to facilitate team building among nursing, medical, and physical/occupational therapy students and faculty members, in collaboration with social workers and case managers from CPS. IPAP also provided learning opportunities in an alternate clinical site—the client’s home—thereby impressing the importance of community family-based service on the interprofessional students. The service area was Texas’ Public Health Region 6, with thirteen counties comprising the greater Houston area. Most of these MFC were in low-income households with limited access to medical services because of transportation, language, health illiteracy, and other family-based barriers to care.

**Results:** The IPAP received funding from HRSA from September 2012-June 2015. Over the past three semesters, there have been 162 interprofessional students from three universities collaborating to assess and educate 43 families with MFC.

**Implications:** The IPAP has impacted interprofessional students, vulnerable families and CPS team members. This model can be easily disseminated to other universities to benefit surrounding communities.

**P4-48. Replication of an Interprofessional Error Disclosure Module at Three Health Science Universities: Lessons Learned**

- **Eric L. Johnson,** University of North Dakota, School of Medicine and Health Sciences, Grand Forks, ND, USA
- **Erin Blakeney,** University of Washington, Center for Health Science Interprofessional Education, Research and Practice, Seattle, WA, USA
- **Carla Dyer,** University of Missouri, School of Medicine, Columbia, MO, USA

**Submitted abstract:**

**Background:** Creation of educational modules to promote interprofessional education (IPE) and patient safety team skills can be resource-intensive and beyond the capacity of many institutions. Exportation of developed modules to other institutions is a promising means of expanding access to IPE. This abstract describes the process of replicating an IPE Error disclosure module at three institutions.

**Objectives** for the replication and implementation of this module included evaluation of: 1) student attitudes about team based error disclosure, 2) faculty development in IPE and disclosure, and 3) replication process examination to reveal common lessons learned.

**Methods:** The module itself involved an interactive lecture, small group discussion and low fidelity simulation. Two tools summarized qualitative and quantitative data about the adaptation and implementation process at the four participating institutions. The first tool asked respondents to describe the process of implementation at their institutions. The second tool collected aggregate quantitative results of student and faculty evaluation responses.

**Results:** During 2012-2013, 1359 students and 167 faculty/staff from eight disciplines participated in error disclosure training at the one originating and three replicating institutions. Students gave favorable ratings to items across three common domains: Instructional Mode, Collaboration, and Knowledge Skills.
Students perceived standardized family member and/or facilitator feedback as promoting improvement in their communication skills (mean range: 4.36-4.79 on five point Likert scale); viewed this opportunity to learn with other professional students as valuable (mean range: 4.35-4.85) and reported thinking about disclosure as a team was helpful (mean range: 4.5- 4.81). All institutions agreed comprehensive facilitator training materials were critical to implementation. Student and faculty feedback was positive, and the module filled a curricular gap at participating institutions.

**Implications:** The replication and implementation of the Error Disclosure Module across these institutions was a positive interprofessional experience, suggesting ready adaptability for integration into existing health science curricula.

**Author Biographies**
Eric L. Johnson, M.D. is an Associate Professor in the Department of Family and Community Medicine at the University of North Dakota School of Medicine and Health Sciences, where he is the Director of Interprofessional Education and Medical Director of the Physician Assistant Program. Dr. Johnson serves as Assistant Medical Director of Altru Diabetes Center and Valley Memorial Homes, and President of both Tobacco Free ND and American Diabetes Association- ND Affiliate Community Board.

Erin Abu-Rish Blakeney, RN is a PhD Candidate in Nursing Science and a graduate research assistant on interprofessional education grants at the University of Washington. Previously, at New York University, she helped integrate graduate nursing students into international service learning projects with dental students in Honduras and Nicaragua. Recently, Erin received the Journal of Interprofessional Care’s Baldwin Award for her first-authored manuscript, ‘Current trends in interprofessional education of health sciences students: A literature review’.

Carla Dyer, MD is an Associate Professor of Clinical Medicine in the Departments of Internal Medicine and Child Health. She directs the Introduction to Patient Care, pre-clerkship doctoring skills course, at the University of Missouri School of Medicine. She leads interprofessional education efforts at the School of Medicine and is Clerkship Director for the Department of Internal Medicine.

**P4-49. Fostering Interprofessional Education and Care Across Cultural Paradigms**
- **Jennifer Morton**, University of New England, Portland, ME, USA
- **Trisha Mason**, University of New England, Portland, ME, USA
- **Dennis Leighton**, University of New England, Portland, ME, USA

Submitted abstract:
International Short term cultural immersions are a rich opportunity for health professions students to learn from, with and about each other across cultural paradigms. Additionally, participants gain a heightened appreciation for the resource limitations inherent in other cultures that foster knowledge and attitudes regarding health disparities.

**Background:** The University of New England’s Ghana Health Immersion program visits the Western Region of Ghana twice per year with teams of students and health providers. In partnership with a local University and the Ministry of Health, a long term trusting relationship has ensued which has provided a backdrop for collaborative learning and practice among rural and urban communities.
Methods: In March and August, student teams of up to 24, from up to 8 health professions, and accompanying supervising faculty, work alongside Ghanaian Health Professionals and Community Health Workers in a community based clinical setting. UNE students receive advanced preparation that includes cultural sensitivity training, understanding resource limited settings, TeamSTEPPS/ LEP, and more. They then participate in an experience of clinical operations and cultural immersion in the twin cities of Sekondi and Takoradi, Ghana.

Results: For over 15 years evaluative data has revealed participant/ students have heightened cultural proficiency and a deeper understanding of the complexities of low resource health settings. Additionally, students report that such an experience has enhanced their understanding of what team based care means with respect to patient outcomes and team camaraderie.

P4-50. Aligning Student Service Learning Opportunities with Developing Community Engagement Programs: The Healthy Columbia Campaign

- Sara Goldsby, University of South Carolina, Columbia, SC, USA
- Christopher Goodman, University of South Carolina, Columbia, SC, USA
- Terri Jowers, Healthy Columbia, Columbia, SC, USA

Submitted abstract:
Background: In 2011, the South Carolina Vision Team initiated a plan to engage community leaders in a project to develop solutions to the health problems prevalent in a specific community. More than 30% of residents in the 29203 zip code were uninsured and sought access to healthcare through emergency department visits when needed. Diabetic amputation rates were one of the highest in the country. The team’s ultimate goal was to create significant, sustainable improvements population health while reducing health care spending.

Objectives: To discuss the connection of health professional students with community needs to improve the health of a population and access to healthcare.

Methods: To fulfill the mission of the Vision Team, leaders launched the Healthy Columbia Campaign and recruited medical, nursing, pharmacy, social work, and public health student volunteers to engage in a variety of activities. The many facets of the project allowed health professional students to determine where they could best assist – from developing programs and policies to collaborating with individuals at community-based health screening events and discussing personal health.

Results: To date, more than 1,300 community members have benefited from services performed by more than 135 students from all health professions at more than 50 health screening events. Through the campaign, students have built a relationship and created commitments with the community. Student participation has highlighted the disparity in access to healthcare for one community and prompted students to seek bigger solutions to health and wellness barriers. Through Healthy Columbia, student volunteer efforts have created a stable partnership with a community facing health inequities.

Implications: Currently, students from multiple health professions are working on a grassroots push for the development of a permanent, community-based health home where students could formally continue to work interprofessionally and collaboratively to make greater positive impact on health in the community.
**Author Biographies**

Sara Goldsby earned her BA in psychology at Coastal Carolina University and is currently working on a dual masters in social work and public health at the University of South Carolina. She is a member of the Association for Women in Psychology, and the National Association for Social Workers.

Christopher W. Goodman earned his MD from the University of South Carolina and completed his internal medicine residency at Emory University. He is an assistant professor in Internal Medicine at USC School of Medicine conducting research on trust within patient and practitioner relationships, and patient perceptions of quality of care. He is a member of the USC interprofessional group.

Terri Jowers attended Clemson University, and worked for eight years as the director of a South Carolina crisis center for adult and child victims of sexual assault and domestic violence. As a political activist, Terri has worked on numerous campaigns and advocacy issues. As Director of Healthy Columbia, she organizes grasstops and grassroots to change the balance of power in health to build power-with relationships to create sustained health improvements in underserved communities.

**P4-51. Building Leadership: The Impact and Importance of Multi-disciplinary Health Fellowships for graduate students**

- **Nancy Zionts**, Jewish Healthcare Foundation, Pittsburgh, PA, USA

**Submitted abstract:**

**Background:** Graduate health education programs are notoriously weak in teaching subjects that are vital to preparing health providers to successfully practice. Since 2001, The Jewish Healthcare Foundation has operated an innovative series of fellowship programs designed to compensate for these weaknesses by building the leaders of tomorrow – champions of quality, safety, and innovation – through rich, multi-disciplinary educational experiences at the start of their careers.

**Objectives and Results:** This presentation will provide the audience with a strong understanding of the role, necessity and structure of multi-disciplinary fellowships as a critical component of graduate education in health-related fields.

Specifically, this presentation will:

- Outline the design and success of 3 fellowship models. Through access to healthcare experts, high quality curricula and a focus on the system of care, the fellowships address issues of patient safety, quality improvement, leadership, and health innovation.
- Highlight opportunities for applying program insights to address weaknesses in traditional graduate health degree curricula.
- Discuss the impact of the educational model on the behavior of future healthcare providers.

**Methods:** This presentation will achieve draw on evaluations and experiences from more than a decade of designing and managing innovative health fellowships. These programs have engaged, and been refined by, more than 500 future healthcare leaders, and provided comprehensive learning experiences on issues sorely overlooked in graduate health programs – health IT, team-based care, systems thinking, and organizational behavior.

**Implications:** Healthcare is in a state of major transition, yet graduate programs in health-related fields have been slow to adopt curricula that adequately prepare future providers to practice in the new environment. The multi-disciplinary fellowships of the Jewish Healthcare Foundation were developed to
address this gap by preparing the future healthcare workforce to improve patient care, advocate for policy change, and create innovative products capable of revolutionizing the quality and safety of healthcare.

Author Biographies
Ms. Zions is chief operating officer and chief program officer for the Jewish Healthcare Foundation and its supporting organizations, overseeing a grant agenda that includes aging, health workforce development, quality, and Fellowships. Prior to JHF, she was employed for 10 years at Forbes Health System in the areas of administration, planning and quality improvement. Ms. Zions is a native of Montreal, Canada and earned a bachelor's degree in chemistry and an MBA from Concordia University.

P4-52. Interprofessional Health Education Gives a Meaningful Voice to Gen-Silent Elders

- Paula Hutchinson, Dalhousie University, Halifax, NS, Canada
- Susan Hutchinson, Dalhousie University, Halifax, NS, Canada
- Jacqueline Gahagan, Dalhousie University, Halifax, NS, Canada
- Cybelle Rieber, CDHA Pridehealth, Halifax, NS, Canada

Submitted abstract:
The goal of inter-professional health education (IPHE) is to improve inter-professional collaboration and provide better person-centered care. In order for us to achieve this goal, our students—as emerging health professionals—need to learn to work together and also learn about the issues that patients face in the healthcare environment. But how do we bring these issues to life and make them meaningful for our healthcare profession students, particularly when these may be issues that they don’t encounter in their core curriculum or in their daily lives?

The purpose of this innovative IPHE was to identify the “ingredients” of a meaningful forum for highlighting an important issue that would also have a significant impact on students’ inter-professional learning. Until recently, persons who are lesbian, gay, bisexual, transgender, and queer (LGBTQ) have been invisible as healthcare consumers. “Gen Silent” a critically acclaimed documentary provides us with intimate access to the daily lives of six LGBTQ elders over the course of one year. “Gen Silent” highlights the stigma and health issues faced by LGBTQ elders and their families in healthcare settings (Maddux, 2011). We brought our health profession students from Nursing, Social Work, Health Promotion, Kinesiology, and Recreation Therapy (n=97) together with LGBTQ community members (n=35), clinicians, and health and policy professionals (n=12) to watch the film, to challenge their assumptions, and critically discuss ways that health professionals could collaborate to provide person-centered care to LGBTQ elders.

Our presentation will detail our process and outcome evaluation of the participants’ roles, key themes and, particularly, students’ as well as the LGBTQ community members’ insights drawn from the success of this IPHE forum. Lessons learned will be discussed with implications for curricula that will enhance inter-professional education and make patient diversity more meaningful and manageable for emerging health professionals.

P4-53. Inter-Professional Learning Engages Persons With Intellectual Disabilities as Simulated Patients

- Paula Hutchinson, Dalhousie University, Halifax, NS, Canada
- Brian Hennen, Dalhousie University, Halifax, NS, Canada
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**Submitted abstract:**
Patient-centered care for complex conditions is the ethos of inter-professional health education (IPHE) and collaboration. For health care practitioners, persons with intellectual disability are among the most complex because they have person-specific communication styles and varying levels of cognitive abilities and capacities for consent. Individual medical issues must be distinguished from co-morbid symptomatology. Development and initiation of treatment plans usually involve multiple health care providers. This necessitates a team approach for understanding, integrating and carrying out health care plans. Such team management provides an excellent clinical focus for inter-professional learning. Our inter-professional team developed an innovative IPHE curriculum for training persons with intellectual disability to act as simulated patients (n = 7) and provide clinical inter-professional practice for health profession students (n = 36). Our learning objectives were to improve students’ clinical and communication skills in assessing capacity to give consent and to develop inter-professional collaboration skills.

Small inter-professional student groups from the disciplines of Medicine, Nursing, Social Work, Physiotherapy, Occupational therapy, and Recreation Therapy completed a program of three 90 minute sessions where they engaged with trained facilitators in structured group discussions using both pre- and post-clinical simulations. The sessions were evaluated through direct observations, self-report surveys, and focus groups.

Process evaluation results indicated that students wanted more information about communicating with persons with intellectual disability, liked the balance of facilitation and discussion, and valued the insightful and critical feedback from faculty and simulated patients. Outcome evaluation results indicated that 100% of students thought the topic was relevant to their anticipated field of practice, 91% had a better understanding of the main issues, 94% had a better appreciation for patient-centered care, 88% were more confident to assess capacity for consent, and 97% were more confident to collaborate with other health professions. The implications for IPHE with simulated patients who have intellectual and communication disorders will be detailed.

**P4-54. Interprofessional Education at the IWK Health Centre: A Redesign of Structures & Processes**

- **Heather Simmons**, IWK Health Centre, Halifax, NS, Canada
- **Rob Martell**, IWK Health Centre, Halifax, NS, Canada
- **Anne Godden-Webster**, Dalhousie University, Halifax, NS, Canada

**Submitted abstract:**
**Background:** For the past six years, the IWK Health Centre has been providing innovative interprofessional education (IPE) experiences for students from a wide variety of health professions and educational institutions. The organizational structure supporting Interprofessional practice at the health centre has transitioned several times during that six year period, with resulting changes to the governance for IPE.

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**Objectives:** This presentation will describe the evolving structure of IPE governance at the IWK Health Centre, the engagement of partnering educational institutions, the ongoing development of structured processes for IPE experiences at the IWK Health Centre, and visioning for expanding IPE to staff.

**Methods:** The IPE organizational structures have evolved from an informal steering committee in 2007 to a formal IPE Steering Committee in 2011, with representation from a variety of health care disciplines, and partners from the education sector. The evolution of the IWK supporting structures and committees continued in 2013 with a revised visioning of the IWK IPE Steering Committee purpose, and the formation of the IWK IPE Operations Subcommittee. The purpose of the IWK IPE Operations Subcommittee is to support the operations of IPE experiences.

**Results:** In 2013, in order to broaden the reach and strengthen IPE at the IWK, the IPE Steering Committee began work on the evaluation and revision of strategic short, medium and long term goals that were developed in 2011. The IWK IPE Operations Subcommittee is refining an operational plan for students, such as timelines; developing, reviewing, and updating tools and resources; and, developing, reviewing, and updating process and outcome evaluation methods related to IWK IPE experiences.

**Implications:** Clarity in IPE governance and the existence of structured processes will lend to consistency and growth of the IPE experience at the IWK Health Centre and support continued evolution of expanding Interprofessional education and development to staff.

**Author Biographies**
Heather Simmons, MN has worked at the IWK Health Centre for over 26 years in a variety of roles. In her current role, Interim Manager of Interprofessional Practice, Heather has had the honor to work with Professional Practice Chiefs, Learning & Development, Simulation, Models of Care, Telehealth, and a variety of partners in assessment, planning, and implementation of issues related to practice and interprofessional practice. Heather completed both her undergraduate and graduate degrees at Dalhousie University.

Rob is the Professional Practice Chief for Respiratory Therapy at the IWK and holds a faculty appointment as adjunct lecturer at the School of Health Sciences, Dalhousie where he teaches Neonatal/Pediatric Respiratory Therapy. He is co-Chair of the Interprofessional Operations committee at the IWK overseeing student IPE experiences. He has held a position on the Canadian Board for Respiratory Care Examinations Committee and as Associate Editor for the Canadian Journal of Respiratory Therapy.

Anne Godden-Webster is the Interprofessional Experience Coordinator in the Faculty of Health Professions at Dalhousie University. A graduate in Speech-Language Pathology from McGill University, she brings to her role many years of experience in clinical education, simulation, student supervision and preceptor development both at Dalhousie University and the University of Western Ontario. Her current role is to facilitate the development of new opportunities and initiatives to enhance interprofessional education, particularly in the practice setting.

**P4-55. Interprofessional Simulation in the Pediatric Emergency Department at the IWK Health Centre**
- **Heather Simmons**, IWK Health Centre, Halifax, NS, Canada
Submitted abstract:

Background: The IWK Health Centre’s mission clearly states the importance of education and research as vital components of providing excellence in care, and safe care, to women, children, youth and families. Without research and education, best practices cannot be defined and patient safety is jeopardized.

Objectives: Immersive learning, using patient simulation, has been demonstrated to improve not only the acquisition of skills, team functioning, knowledge and behaviours, but improve their translation into clinical practice.

Methods: Areas of “low volume, high risk” medical challenges where interprofessional care teams must perform at a very high level of proficiency, incorporating medical skill, interpersonal communication and compassionate care for the patient and their family can be particularly challenging. Simulated pediatric emergencies are held weekly in the trauma room of the pediatric emergency department (ED) at the IWK Health Centre (IWK). These sessions coordinated as a collaborative effort between an ED physician and the IWK simulation coordinators involve members of the interprofessional team and learners.

Results: Pediatric medical residents voluntarily come in early for their shift in order to be able to participate. IWK leadership support team members by assigning the simulation event to ensure that team members are freed from other duties to participate. Though anecdotal, the benefits have been expressed by many participants from the interprofessional team and learners. Some of the comments and observed benefits include increased collaboration between the interprofessional team members, increased knowledge, confidence, and competence when dealing with patients and families in the pediatric emergency department. Simulated events have also enabled the identification and resolution of process issues and practice gaps.

Implications: Interprofessional in-situ simulation events provide an opportunity for increasing team collaboration, confidence, and competence in a safe environment prior to dealing with actual emergency situations with patients and families.

Author Biographies

Stephanie Watton is a Simulation Coordinator at the IWK Health Centre in Nova Scotia and has been a Registered Nurse of 26 years. She graduated from Western Memorial University in Corner Brook, Newfoundland in 1988. The majority of her nursing career has been in the Neonatal ICU. Stephanie has always had a passion for teaching and her role as Simulation Coordinator has provided her with many exciting opportunities to promote interprofessional practice and team-based training.

Dr. Vered Gazit, IWK Emergency Department, Assistant Professor Dalhousie University, obtained her medical degree from the Hebrew University of Jerusalem, Israel. She completed her residency in Pediatrics at the Wolfson Medical Center in Israel and her Pediatric Emergency Medicine training at the Hospital for Sick Children in Toronto. She is interested in using medical simulation to improve patient safety, teamwork and resuscitation skills. Vered is a physician Lead on the IWK Simulation Steering Committee.

Heather Simmons, MN has worked at the IWK Health Centre for over 26 years in a variety of roles. In her current role, Interim Manager of Interprofessional Practice, Heather has had the honor to work with Professional Practice Chiefs, Learning & Professional Development, Simulation, Models of Care, and a variety of partners in assessment, planning, and implementation of issues related to practice and interprofessional practice. Heather completed both her undergraduate and graduate degrees at Dalhousie University.
P4-56. How To Weave Culture Into An Interprofessional Course

- **Cilvia Henderson**, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- **Marilyn Hanson**, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- **Susan Tappert**, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

Submitted abstract:
Rosalind Franklin University offers eight on-campus clinical degree options. The university’s mission is “to serve the nation through the interprofessional education of health and biomedical professionals and the discovery of knowledge dedicated to improving the health of its people”. This includes promoting, educating and providing cultural and interprofessional experiences to our students. To this end, all on-campus clinical students are required to complete the course Interprofessional Teams and Culture in Health Care during their first year at the university. The course is offered through the Interprofessional Healthcare Studies department and is designed to allow students from all programs to learn about, from and with one another for the purpose of preparing them to provide effective team-based, culturally sensitive, patient-centered care.

One course objective is for students to demonstrate sensitivity to other people’s cultures. The Office of Multicultural Services and the Interprofessional Healthcare Studies department have collaborated to achieve a foundation of cultural experiences designed to help achieve this outcome. The experiences include events such as movies, lectures and cultural events with topics that consist of gender identity in health care, LGBT Ally Training, serving non English speaking patients, sensitive sexual history taking techniques, international health care and race relations, to name a few. These topics are not traditionally addressed in the classroom, therefore students, faculty and staff are eager to attend these sessions. These sessions provide a holistic approach to educating future practitioners as well as promoting diversity and inclusion within the workplace. Events are planned on a quarterly basis and are held during the lunch hour in order to promote attendance. Students are allowed to choose which events they would like to attend.

To tie the event to the course objective, students are asked to complete a reflection assignment. The reflection question is designed to encourage students to consider how the cultural event experience relates to their future role as a health care provider, as they prepare to serve people of diverse cultures and participate with an IP team. Suggestions for how to implement this type of program, attendance statistics, and learning outcomes samples will be provided.

P4-57. Excellence in Interprofessional Health Care – an elective activity for students at Rosalind Franklin University of Medicine and Science

- **Susan Tappert**, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- **Sarah Garber**, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- **Marilyn Hanson**, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

Submitted abstract:
**Background:** Rosalind Franklin University of Medicine and Science recognizes students at graduation who have demonstrated leadership in interprofessionalism by awarding a certificate in Excellence in Interprofessional Health Care. This opportunity is offered to students from 9 health care degree programs.
Program objectives foster the development of interprofessionalism in the students participating in the program so that each graduating student is prepared to:

1. Provide leadership in Interprofessional Healthcare
2. Understand and practice interprofessional, evidence based, collaborative care
3. Understand and practice life long learning
4. Set and achieve interprofessional goals in practice, education, scholarship and service

**Method:** The program is administrated by an IP faculty Steering Committee. Students apply for entry into the program after completing the course: “Interprofessional Teams and Culture in Health Care”, required of all first year students in RFUMS health care degree programs. Accepted students are assigned a faculty mentor and must complete four elective activities in Service, Education, Research, Clinical Practice and Translational Research. Three electives must be in different areas.

**Results:** Four students have completed the certificate. Four more are in progress. Primary programs of the students include Psychology Medicine and Physical Therapy.

Certificate alumni are currently employed in healthcare, applying their interprofessional experience in such diverse areas such as clinical psychology, medical residency, and physical therapy. Alumni report that they are working in close partnership with several health professions and they are keenly aware of interprofessional interactions and opportunities as well as concerns of other professionals.

**Implications:** During the presentation, we will discuss the development, implementation, administration and assessment of the program. After attending the presentation, institutions should be able to adapt the program to give their students the opportunity to expand their knowledge of interprofessional education and practice as well as demonstrate leadership in IP Health Care.

**P4-58. Perceptions of Pharmacy Students, Pharmacists and Pharmacy Faculty in Qatar to Interprofessional Education and Collaborative Practice**

- **Alla El-Awaisi,** Qatar University, Doha, Qatar
- **Lesley Diack,** Robert Gordon University, Aberdeen, Scotland, UK
- **Sundari Joseph,** Robert Gordon University, Aberdeen, Scotland, UK
- **Maguy El Hajj,** Qatar University, Doha, Qatar

**Submitted abstract:**

**Background and Objectives:** Interprofessional education is a valuable educational approach for preparing students in different health care disciplines to provide patient care in a collaborative team atmosphere. Despite the availability of evidence that supports the effectiveness of Interprofessional Education as an important aspect of developing health professions’ students and its effectiveness, there is minimal published research on this topic in the Arab countries. The objective of this research is to explore the views, attitudes and perceptions of pharmacy students, pharmacists and pharmacy faculty in Qatar to interprofessional education and collaborative practice.

**Setting and Method:** A mixed methods design is used as the conceptual framework for this research. This research comprised three stages:

1. A review of the literature.
2. An online anonymous survey, which incorporates the validated Readiness for Interprofessional Learning Scale (RIPLS), was developed and sent to all pharmacy students, all pharmacy faculty and to a stratified cluster random sample of practicing pharmacists in Qatar.

3. Focus groups were conducted for each cohort to explore interprofessional education and collaborative practice further.

This research has been approved by the Robert Gordon University (Scotland) and the Qatar University’s Institutional Review Boards.

Results and conclusions: Preliminary data, from this research, will be presented during the conference. This research is the first of its kind in the region; it will generate a body of knowledge regarding the development, implementation, and evaluation of Interprofessional Education in healthcare in Middle East that is comprehensive and unique. The knowledge and experience gained from this research will inform an ongoing and continual improvement process to maintain the initiative as the healthcare system in Qatar grows and evolves to meet the needs of its population.

Author Biographies
Alla El-Awaisy is a Clinical Lecturer at the College of Pharmacy in Qatar University. She graduated from Strathclyde University in Glasgow (UK) in 2001 with an MPharm and then completed her MSc in Prescribing Science from the Robert Gordon University (UK) in 2009. She is an experienced clinical pharmacist with 10 years UK experience. She is currently doing her PhD with the Robert Gordon University (UK) on Pharmacy’s Perspectives of Interprofessional Education and Collaboration: An Investigative Study in Qatar & the Middle East.

Dr Lesley Diack is a senior lecturer in Elearning at the School of Pharmacy and Life Sciences of the Robert Gordon University Aberdeen. For the last 10 years she has been actively working on and researching IPE.

Dr Sundari Joseph has a background in clinical nursing practice, 27 years experience in nurse education and for the past 4 years leads Interprofessional Education (IPE) across the University of Aberdeen and Robert Gordon University (Scotland)

Dr. Maguy El Hajji is an Assistant Professor and Chair of the Clinical Pharmacy and Practice Section at the College of Pharmacy in Qatar University. Her research areas include pharmacy practice and pharmacy education.

P4-59. Preparing the Next Generation: Collaboration Ready Workforce for Oral Health

- **Mayumi Willgerodt**, University of Washington Bothell, Bothell, WA, USA
- **Erin Hartnett**, New York University, New York, NY, USA
- **Anita Duhl Glicken**, nccPA Health Foundation, Johns Creek, GA, USA
- **Jane Grover**, Council on Access, Prevention & Interprofessional Relations/ADA, Chicago, IL, USA

Submitted abstract:
**Background:** Reducing oral health disparities and increasing access to oral health are critical to improving overall health and well-being. Incorporating oral health into primary care requires increasing the workforce capacity through IPE, faculty development, curriculum integration and development of best practices to provide oral health care in an interprofessional collaborative practice setting.
**Objectives:** The purpose of this panel is to demonstrate how interprofessional education and collaborative practice can make an impact on oral health by showcasing initiatives that address current needs in team based care: 1) bridging the education to practice gap through activities that are spread across the educational continuum, 2) producing a workforce that is collaborative practice ready for oral health, 3) incorporating oral health interprofessional best practices in existing community based primary care practices. At the end of the session, participants will be able to:

1. Understand how IPE can be used as a tool to address oral health disparities
2. Describe three exemplars in the US that are advancing the Oral Health in Primary Care agenda
3. Identify two ways in which oral health competencies may be taught and two interprofessional clinical activities

**Methods:** We will begin with how IPE and collaborative practice are ideal for advancing the oral health agenda, followed by an overview of oral health competencies and the work of the National Interprofessional Initiative on Oral Health. We will then present best practices models of IPE and CP that focus on oral health along the education to practice continuum: UW Oral Health Initiative for Advanced Health Professions students, NYU Oral Health Nursing Education and Practice and PA Oral Health Leadership Initiative. We will also share the ADA’s perspectives on oral health education and the need to seize the opportunity to ensure that future dentists are collaborative practice ready. We will also share our faculty development and site preparation activities by having participants actively engage in adapted M2M and World Café exercises specific for oral health.

**Results** (actual or expected): Participants will leave the session with an understanding and appreciation for how interprofessional education and clinical activities can not only produce a workforce that is collaborative practice ready around oral health but also serve to educate current providers on the need to recognize the oral—systemic link and engage in team based care. Participants will also leave with concrete examples of didactic and clinical activities that may be used for interprofessional education around oral health.

**Author Biographies**

Mayumi Willgerodt PhD, MS/MPH, RN is a 2013 Macy Foundation Faculty Scholar focused on advanced practice nursing and dental partnerships that bridge the academic to practice gap in IPE and team based care, particularly with vulnerable children and families. Dr. Willgerodt leads the evaluation team in a HRSA funded grant focusing on technology enhanced IPE for advanced practice students. Dr. Willgerodt was a 2011 UW IPE Teaching Scholar and also practices as a school nurse.

Erin Hartnett, DNP, APRN—BC, CPNP is Program Director for the College of Nursing’s oral health programs, Oral Health Nursing Education and Practice (OHNEP) program funded by the DentaQuest Foundation, Washington Dental Service Foundation and Connecticut Health Foundation, and the HRSA funded Teaching Oral Systemic Health (TOSH) program. Dr. Hartnett is a pediatric nurse practitioner in pediatric neuro—oncology at NYU Langone Hassenfeld Center for Children with Cancer and Blood Disorders.

Dr. Judith Haber is Associate Dean for Graduate Programs and Ursula Springer Leadership Professor at NYU College of Nursing. She is Executive Director of the Oral Health Nursing Education Practice (OHNEP) program and Project Director for the Teaching Oral Systemic Health (TOSH) initiative. She is on the Steering Committee of the National Interprofessional Initiative on Oral Health (NIIOH) and a member of the HRSA Expert Panel developing Core Interprofessional Competencies for Primary Care Providers.
Anita Duhl Glicken, MSW is President/CEO of the nccPA Health Foundation, a supporting organization to the National Commission on Certification of Physician Assistants and Associate Dean and Professor Emerita at the University of Colorado School of Medicine. Ms. Glicken has authored over 75 publications and led several national and international health care delivery change processes, many focused on IPE and IPP. She is currently leads the national physician assistant initiative in oral health.

Dr. Jane Grover is Director of the American Dental Association Council on Access, Prevention and Interprofessional Relations. As a public health dentist who received dental and public health degrees from the University of Michigan, she has adjunct dental faculty experience from both Indiana University and the University of Michigan. She was a Dental Director/clinician at a community health center (FQHC) for twelve years and has been an examiner for dental board licensing exams.

P4-60. IPE for Advanced Health Professions Students in Primary Care: Elizabeth – A Typical or Troubled Teen?

- Jennifer Sonney, University of Washington, School of Nursing, Seattle, WA, USA
- Taryn Lindhorst, University of Washington, Seattle, WA, USA
- Mayumi Willgerodt, University of Washington Bothell, Bothell, WA, USA

Submitted abstract:
**Objectives:** The objectives for this event were to: engage in conversation on professional expertise and roles specific to a patient situation and work together to develop a collaborative plan of care concordant with the IPEC competencies.

**Methods:** Nurse practitioner, physician assistant, and social work students together with family medicine residents worked in groups of 6-8. Sessions began with an “icebreaker” activity where participants were asked to describe the professional roles, educational trajectories, and contributions each profession makes to a health care team. Next, participants viewed videotaped segments of an adolescent establishing care with a community-based primary care provider. Numerous issues arise during the segments, including the adolescent revealing concerns about her safety. The IPE groups discussed the various concerns, particularly if they suspected abuse, how to report it, and how to address the aftermath of reporting. Facilitators utilized appreciative inquiry techniques to engage all participants in the group activities.

**Results:** Participants completed a pre and post assessment that targeted their knowledge about team based care. Participant evaluation had an overall rating of 4.67 out of a possible 5. Evaluation results and feedback will be presented table format in the poster.

**Implications:** This poster provides a concrete example to educators on how to incorporate discussions of professional ethics of care in an unfolding case targeted specifically for advanced health professions students that may be replicable in their own institutions/organizations.

P4-61. An Evaluation of a Student-Run Interprofessional Clinic.

- Tamzin Batteson, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- Sarah Hershman, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- Miao Hua, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

Submitted abstract:
**Background:** Student-run clinics (SRC) provide a unique platform for patient care and healthcare education. From their inception, SRCS have harbored students’ learning of empathy and compassionate practice, namely the humanistic side of medical education. A national survey found that nearly half of all medical school respondents were dissatisfied with their preparation in clinical skills for delivering optimal health care. As it is possible that other healthcare profession students may share this attitude, we attempt to address how an interprofessional and student-run setting of caregiving can supplement these shortcomings in education and training.

**Objective:** To assess the transition of a student organization into a Student-Run Interprofessional Clinic as a platform for interprofessional experiential learning.

**Method:** A mixed methodology including surveys and interviews will be employed. Surveys will be self-administered before and after volunteer experiences in the clinic to assess students’ experience, self-awareness, teamwork, expectation, and professional growth. Interviews will be conducted after volunteer experiences.

**Results:** Student-run clinics place students as a director of the larger institutional affairs and as managers of the clinic. We are interested in gauging the level of experiential learning of which students of the Interprofessional Community Clinic (ICC) are exposed. We expect to find differences depending on the organizational roles of students in the clinic, their training program, and seniority in their respective programs.

**Implications:** Evaluation of an IP student-run clinic focused on training professional students regarding collaboration with different professionals is essential to maximizing effectiveness as a tool of interprofessional experiential learning. Such training will benefit patients and students in their clerkships and ultimately, their careers.

**P4-62. Description and Evaluation of a Student Run Interprofessional Clinic: From Conception to Start Up**

- Tamzin Batteson, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA
- Miao Hua, Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

Submitted abstract:

**Background:** At the Rosalind Franklin University (RFU) Health Systems, a burgeoning and successful Interprofessional student-run clinic (SRC) has been in operation since September 19, 2013. The Interprofessional Community Clinic (ICC) allows students to serve the local community and have clinical exposure early in their education. Incorporation of a SRC into medical education facilitates a smoother transition from the basic sciences to clinical medicine. Many SRCs focus their model on interprofessional training through integration of medical students with students of various health professions. At RFU, students conceived the plan of starting an SRC to integrate allopathic medicine, podiatric medicine, pharmacy, psychology, physical therapy, physician assistant, and nursing. This broad spectrum representation of RFU and the healthcare field has led to important insights for SRC development.

**Objective:** To qualitatively assess the steps and obstacles of developing an interprofessional student-run clinic.

**Method:** A qualitative methodology was employed on written data in the form of minutes taken at
student leaders’ meetings, interviews with student leaders, community leaders, faculty sponsors, and school administrators.

**Results:** A Thematic Analysis was conducted on the minutes and exploration of emerging themes as a means to generating supportive evidence highlighting elements crucial in the implementation of the ICC.

**Implications:** An interprofessional SRC that focuses on training professional students regarding effective collaboration with different professionals will benefit student education and ultimately patient care. Our experience could provide a working model for future interprofessional SRCs.

*The authors would like to acknowledge the members of the Interprofessional Clinic Initiative Working Group.

**P4-63. The involvement of service users sharing their lived experiences of learning disabilities in an Interprofessional Student Conference – assessing the perceived learning outcomes of students, professionals and service users.**

- **Kate Parkin**, University of East Anglia, Norwich, Norfolk, UK
- **Tom Shakespeare**, University of East Anglia, Norwich, Norfolk, UK
- **Susan Lindqvist**, University of East Anglia, Norwich, Norfolk, UK

**Submitted abstract:**

**Background:** A one-day student interprofessional learning (IPL) conference is offered as a third level of IPL (IPL3), aimed at 3rd year health and social care students. The focus of the next IPL3 conference is on how interprofessional working can promote the independence and dignity of people with disabilities. The conference will involve students, service users with disabilities and professionals involved in their care. The aim of this study is to further understanding of what students learn from this kind of learning intervention.

**Objectives:** To explore service users’ views of collaboration between health and social care professionals and the quality of services available to them. To assess the perceived learning outcomes of students. To compare how these perceived compared with the intended outcomes of the conference.

**Methods:** Prior to the conference, service users, drawn from a local voluntary organisation, will be asked for their views on collaboration between health and social care professionals and the quality of services available to them. A focus group of 6-8 participants will be conducted; common and divergent views will be extracted from the transcribed data. A survey will be handed out to conference participants to assess perceived learning outcomes of students.

**Results:** Results from the Focus group with service users prior to the conference and data from the survey collected after the conference will be presented and discussed together with a comparison with intended outcomes and a discussion on what this study added to increase our understanding of what conference participants learn from taking part.

**Implications:** The findings of this study will: i) help assess how one-day IPL opportunity may impact on building bridges between health and social care professionals from the perspectives of the participants; ii) help students and professionals understand some of the issues associated with working with a person with a disability.
Author Biographies
Kate Parkin qualified as a social worker in 1980. Developed an expertise in multi-agency working. In 2012 started at UEA as a lecturer in interprofessional practice.

Tom Shakespeare has written extensively on disability. Spent five years at the WHO involved in producing the World Report on Disability. Has an interest in teaching about disability.

Susanne Lindqvist joined the Centre of Interprofessional Practice in October 2002 Appointed Centre Director in 2005. Has published extensively on IPL

P4-65. Virtual Interprofessional Education in Remote and Rural Settings: an Australian and Scottish Experience

- Sundari Joseph, Robert Gordon University, Aberdeen, Scotland, UK
- Lesley Diack, Robert Gordon University, Aberdeen, Scotland, UK
- Margo Brewer, Curtin University, Faculty of Health Sciences, Perth, Western Australia, Australia
- Kate Duncanson, Curtin University, School of Occupational Therapy and Social Work, Perth, Western Australia, Australia

Submitted abstract:
Background: Remote and rural settings are challenging environments in which to deliver effective interprofessional education (IPE). Logistics and diverse locations create issues for face to face student interaction. Using online solutions can enable a productive substitute. Models for remote and rural interprofessional collaboration have global significance. A pilot project that enabled students in remote and rural placements in Australia and Scotland to engage in online IPE activities will be presented. These students not only interacted with their peers on placement but also interacted online internationally. They developed an international IPE perspective to their remote and rural placements.

Objectives and Methods: Building on our existing experience of virtual IPE communities, the authors designed an international IPE buddy group. This comprised students from Orkney and Shetland Islands, Scotland interacting with students in the Great Southern area of Perth, Australia. They discussed real case scenarios from their placement areas and achieved learning outcomes relating to their experiences.

Results: Findings from the students’ online postings revealed the similarities and differences relating to their understanding of: 1) the local people and cultures and 2) their professional roles and responsibilities. Sharing this with each other led to deeper insights into cross cultural collaboration. Whilst numbers were small (n=7 students), a model for enabling international student interaction as well as engaging in IPE in remote and rural locations has been tested.

Implications: The model described in this presentation has implications for educators designing technological and international aspects of IPE programmes.

P4-66. IPE Symposium on QI: A Model for Collaborative Professional Education

- Beth Chiarrello, Touro College, New York, NY, USA
- Nathan Boucher, Touro College, School of Health Sciences, New York, NY, USA
- Rivka Molinsky, Touro College, New York, NY, USA
Submitted abstract:

Background: The Touro College School of Health Sciences in NYC developed an interprofessional educational symposium focused on healthcare quality improvement (QI). Students and faculty from Nursing, OT, OTA, PT, PA, and SLP discussed the multidisciplinary nature of collaborative health care and the roles and responsibilities of all members of the team. The symposium included break-out sessions encouraging shared problem-solving and decision-making.

Objectives: Describe one's own professional role and responsibilities as well as roles and responsibilities of other health care professionals regarding patient-centered care. Explain how QI reduces errors, increases efficiency, and enhances communication between patients and health care professionals. Engage in a clinically-relevant, collaborative opportunity for professionals/students to solve current health care challenges.

Methods: Moderated panel of invited healthcare professionals from each discipline discussed health care QI in their settings, described their roles, and answered questions from the audience. Multidisciplinary break-out groups followed a hypothetical patient through various practice settings with patient care and QI challenges. Groups were assigned ER admission, acute care, sub-acute rehabilitation, or home-care settings. Each group reported on the outcomes of their interdisciplinary discussions.

Results: Post-event surveys were completed by the 58 participants. Five point scale ratings of moderator/panelists (4.32) and other event components (4.46) were noted. Qualitative feedback about lessons learned included: importance of team approach to quality care delivery; awareness of overlapping team functions; health professions students are knowledgeable of their discipline; enhanced familiarity with other disciplines; importance of interdisciplinary communication to clients/patients. Suggested future collaborations included: collaboration with social workers/nutritionists; smaller breakout groups; QI protocol provision; provision of role/responsibility list for healthcare team.

Implications: Interprofessional communication is critical in increasing efficiency and reducing errors in patient care. This interprofessional symposium facilitated communication among students, faculty, and practicing professionals regarding roles of healthcare professionals, QI challenges and strategies to address those challenges.

P4-67. "I'm going to get personal with you": Guidance for Interprofessional Practice & Education from an Urban Community

- Nathan Boucher, Touro College, School of Health Sciences, New York, NY, USA

Submitted abstract:

Community engagement can reveal what education and skills are needed among health care consumers. This is a model of community engagement for an urban, older adult population in East Harlem, NYC utilizing a senior center providing services to area adults.

The two-pronged approach first utilized senior center-based focus groups conducted in Spanish (n=10) and English (n=11) to assess healthcare decision-making processes, with a focus on end-of-life decisions, among men and women age 40 and older (average age = 65.8, SD =11.5). The majority of participants self-identified as Hispanic or Latino (95%; one declined). Transcribed recordings from the focus groups then underwent two stages of coding by two different coders. Ten common themes emerged from this
coding. The second stage incorporated bilingual skill-building workshops for the same general population (15-20 participants each) focusing on situational decision-making including: Getting the most from your pharmacist encounter; How to prepare for your PCP visit; and I am getting discharged from the hospital: what do I do?

Coded qualitative data from the structured focus groups revealed themes that have implications for multidisciplinary care delivery and interprofessional education. These included: Where Community Members Receive Care; Challenges of Health Care in NYC/East Harlem; Cultural Challenges of Health Care in NYC/East Harlem; Benefits of Health Care in NYC/East Harlem; Key Facilitators in Health Care Decision Making; Key Facilitators in End-of-Life Decision Making; Community Member Recommendations & Observations (including those related to end-of-life); and Perceptions of Health Care Disparity. Skill-building workshops further reflected these themes and pointed to gaps in health literacy and conceptual understanding of illness and care.

To deliver optimal and competent care as a team we need information about what the patients need. This qualitative study, and subsequent health decision making workshops, shed light on an urban community in New York City and can inform inter-disciplinary approaches to care in similar populations across the country.

P4-68. Exploring Interprofessional Practice in Rehabilitation Education Through Service Learning

- Pamela Toto, University of Pittsburgh, Department of Occupational Therapy, Pittsburgh, PA, USA

Submitted abstract:
**Hypothesis:** Opportunity to participate in a structured community experience working with clients with disabilities provides a unique perspective on the concept and benefits of interprofessional practice (IPP).

**Method:** A pilot course was offered to six undergraduate students as part of a Rehabilitation Science curriculum. Weekly, students received 1 hour of didactic instruction on IPP and provided 3 hours of volunteer services at a community center for adults with disabilities based on a social model of care. Student assignments included projects to enhance client programming and a 1:1 interview with a client, summarizing the client’s perception and experience with healthcare professionals.

**Outcomes:** Students compared IPP trends between the medical model of care and non-traditional models of service for adults with disabilities. Using a rehabilitation-based approach, students individually collaborated with clients and staff to produce a sustainable project to enhance select life-skills training classes. Drawing upon the site's mission to foster community inclusion for people with disabilities, the students also facilitated a collaborative, large-scale community service project completed by facility clients that benefitted an area shelter for women and children.

**Conclusion:** Pre-professional rehabilitation students gained knowledge of the benefits of IPP for both traditional and non-traditional healthcare delivery systems through a hybrid service learning model.

P4-69. Practice-based interprofessional education for health and social care students– a review of the evidence

- Barbara Maxwell, A. T. Still University, Mesa, AZ, USA
Submitted abstract:
The focus of this review is interprofessional education for pre-registration health and social care professionals, more precisely on interprofessional education that takes place in the context of clinical practice.

The importance of learning context has been well established within adult learning theory, as espoused by Knowles (1980), and in Kolb’s Experiential learning theory (Kolb, 1984). Contextual learning is advocated as a means to assist with the translation of knowledge, skills, and attitudes developed during the didactic curriculum, to the reality of practice.

Practice-based IPE refers to those opportunities for students to learn about, from and with each other, that occur within the context of clinical practice. Gandasan and Reeves (2005) identified the learning context as a key element of interprofessional education suggesting that the setting for interprofessional activities can have a motivating effect upon student engagement with interprofessional learning activities. Parsell & Bligh, (1998) suggested that learners’ reactions to IPE activities were more favorable when they could see a direct link to their current or future practice.

Documented practice based interprofessional education opportunities for pre-registration health professionals have included the use of simulated clinical environments (Freeth & Nicol 1998). Bond and Spillane (2002) suggest that such simulation can provide an effective mechanism for students to enhance their clinical decision making skills through the integration of concepts and theories with a client’s clinical presentation. Reeves (2000) provided opportunities for students to meet service users and learn from them regarding their health care needs. Both small and large scale structured interprofessional clinical placements have also been documented (Kipp & Pilmott, 2003), Wahlstrom & Sanden, 1998, Nisbet et al, 2008, O’Carroll, et al, 2012), including the pioneering work at the Linkoping Faculty of Health Sciences in Sweden where a full-scale IPE program was developed that included the development of an interprofessional training ward (Areskog, 2009).

Despite theoretical support for such contextual learning and evidence of effectiveness of such experiences there appears to be a lack of attention to practice-based interprofessional education. Rodger and Hoffman (2010) highlighted the paucity of attention in their international survey of interprofessional education. They stated, “IPE experiences during students’ clinical or practice placements were not often offered by respondents despite research suggesting this to be optimal.” (p.488).

This presentation outlines the methods and results of a systematically conducted review of practice-bases interprofessional education for pre-registration health and social care professionals.

The review was guided by the review protocol developed by the NHS Centre for Reviews and Dissemination, University of York, Guidance for those carrying out or Commissioning Reviews (2001).

Author Biographies
Dr. Barbara Maxwell, PT, DPT, MSc, CertTHE, is Professor & University Director of Interprofessional Education & Collaboration, A.T. Still University.
P4-70. Development of an IPE Elective for ATSU-SOMA Community Health Center Sites

- Carolyn Glaubensklee, A. T. Still University, Mesa, AZ, USA
- Barbara Maxwell, A. T. Still University, Mesa, AZ, USA
- Mara Hover, A. T. Still University-SOMA, Mesa, AZ, USA

Submitted abstract:
Currently, A.T. Still University’s, School of Osteopathic Medicine Arizona’s curriculum is a 1:3 program with the first year being delivered to all first year students at the medical school in Mesa, AZ. The rest of the medical school experience brings 10 -12 students to one of eleven community health centers across the United States to complete their medical education. This IPE elective course would create interprofessional teams at each of eleven Community Health Centers across the U.S.

This proposed IPE elective would begin the integration of health professional disciplines by focusing on a virtual patient experience that would require an interprofessional team approach. The medical student enrolled in this elective would have to select which health professions to engage as team members to ensure the delivery of high quality, and effective care to their virtual patient. This team is selected through a “drop-down” menu of medical professionals who provide information on what they do and essentially explain their individual role in the treatment of your patient. As the health care team is selected, the student taking the elective is either gaining or losing points depending on which health care professionals are being added to the team for that specific case.

An expert panel representing the health professional disciplines are convened weekly to interact with the student and the virtual patient by Scopia. The panel is able to communicate with the student about their different roles and help plan a course of treatment for the patient. At other times, the student can access the “team” by discussion boards on blackboard.

Throughout the development of this elective, the patient case evolves over time, the patient undergoes different health problems that require the reshaping of the team, a revision of care and the need for health care professionals to communicate in a timely and effective manner. Once again, this provides the student with the opportunity to either gain or lose points.
This elective also introduces the student to the electronic medical record and the difference in jargon provided by each health care professional is realized. Exercises are provided that demonstrate how the lack of communication and inability to understand other medical professionals directives lead to medical mistakes and patient demise.

The student is also graded according to the IPE core competencies:
1. Values and Ethics for Interprofessional Practice
2. Roles and Responsibilities
3. Interprofessional communication
4. Teams and Teamwork.

Objectives that assess each of these competencies are part of the discussion among the Interprofessional teams. The goals are measureable and the competencies can be evaluated. Thus, the student actually earns a grade in this IPE course and is able to work on skill sets to improve teamwork training and dynamics, listening, evaluating, decision making and leadership. The students representing each health profession must act with respect and understanding to the other team members.
This course will help to educate the students about the concept and the success of collaborative health care and will ultimately provide their future patients with the best possible outcomes and an overall improved health care experience.

**Author Biographies**
Dr. Carolyn S. Glaubensklee, Ph.D. in Medical Science, Associate Professor of Physiology and Chair of the Curriculum Committee for SOMA, A.T. Still University, School of Osteopathic Medicine

Dr. Barbara Maxwell, PT, DPT, MSc, CertTHE, Professor & University Director of Interprofessional Education & Collaboration, A.T. Still University.

**P4-71. Interprofessional Care Access Network (I-CAN): Clinical Education in Underserved Neighborhoods**

- **Peggy Wros**, Oregon Health & Science University, Portland, OR, USA
- **Jennifer Boyd**, Oregon Health & Science University, Portland, OR, USA
- **Tanya Ostrogorsky**, Oregon Health & Science University, Portland, OR, USA

**Submitted abstract:**
The *Interprofessional Care Access Network (I-CAN)* is an innovative model for collaborative practice and education designed to improve health outcomes, reduce health care costs, and enhance the health care experience for disadvantaged and underserved clients/patients, families, and populations. This presentation will: 1. describe an interprofessional clinical and educational program for health professions students; 2. summarize program evaluation metrics and outcomes; and 3. propose implications for coordinated care and population health.

I-CAN strengthens capacity of health care professionals and learners to lead interprofessional practice through collaborative health care delivery, and improves the health and well-being of disadvantaged populations in neighborhoods in Portland and Medford, Oregon. The project coordinates academic programs, community services, and health care delivery and facilitates interprofessional experiences for students, faculty, and practitioners by coordinating care through Neighborhood Collaboratives for Academic-Practice Partnerships (NCAPPs). Academic partners include the Schools of Nursing, Medicine, Dentistry, College of Pharmacy, Global Health Center, and the Office of the Provost. Community partners include primary care clinics, neighborhood organizations, and health services agencies (HSAs) that are federally designated as medically underserved communities. Interprofessional student teams visit clients/patients identified by NCAPP partners and address social determinants of health that affect participation in their healthcare and health outcomes.

Program evaluation focuses on two primary aspects: interprofessional collaboration of team members and client/patient outcomes. Satisfaction and teamwork, and effectiveness are assessed by students, neighborhood partners, and grant team members using various instruments (list). Client/patient data includes health care satisfaction and numbers of EMS call-outs, ED visits, and hospitalizations in comparison with neighborhood norms.

I-CAN is innovative, sustainable, and scalable, and will grow over the grant period to serve as a statewide model for interprofessional health care for underserved populations in an evolving delivery system and for training effective interprofessional care teams.
Author Biographies
Peggy Wros, PhD, RN, is Senior Associate Dean for Student Affairs & Diversity at Oregon Health & Science University (OHSU) School of Nursing and Project Director for the Interprofessional Care Access Network. She is Associate Director for the OHSU Center for Ethics, and a member of the advisory committee for the OHSU Interprofessional Initiative. Dr. Wros has 25 years of experience in nursing education, and expertise in curriculum development, nursing workforce diversity, and healthcare ethics. Jennifer Boyd, PhD, MBA, is Assistant Vice-Provost for Strategic Planning & Program Development at Oregon Health & Science University (OHSU). Dr. Boyd helps lead both OHSU’s dynamic strategic planning process and the OHSU Interprofessional Initiative. She has expertise in programmatic and institutional accreditation and is instrumental in developing OHSU’s IPE curriculum. She also serves on steering committees for OHSU-PSU future School of Public Health, OHSU Global, and an interprofessional communication initiative, OHSU WRITEs.

Tanya Ostrogorsky, EdD, is Assistant Vice-Provost for Assessment and Evaluation at Oregon Health & Science University where she is responsible for oversight of academic program evaluation and assessment for OHSUs 40+ academic degree programs as well as university-wide initiatives such as the OHSU Interprofessional Initiative. Dr. Ostrogorsky has worked as an evaluator for nearly 20 years and has a demonstrated record of expertise in designing and implementing evaluations using a variety of methods.

P4-72. Outcomes of the Faculty and Student Evaluation of the Year 1 Curriculum: Foundations of Interprofessional Education

- Tanya Ostrogorsky, Oregon Health & Science University, Portland, OR, USA

Submitted abstract:
This session will present and allow for discussion of faculty and student evaluation results of Oregon Health & Science University’s (OHSU) Foundations of Interprofessional Education program. The OHSU Foundations series is a year-long, 4-session series of either half-day or all-day events, where 100+ faculty members and 650+ students come together for a combination of large group and small group activities.

Groups of 12 students from various academic programs remain together across sessions and are led by a team of Interprofessional educators. Unique features of OHSUs Foundations series include: Curriculum design based on four of the 10 OHSU Core Competencies, integration with other interprofessional activities such as New Student Orientation, and the inclusion of basic science graduate students into the sessions.

This session will present the results of the overall assessment activities and evaluation results while highlighting specific themes/outcomes identified throughout the year. Examples include opportunities for change and reflection on Foundations logistics and curriculum, outcomes experienced by students and faculty throughout the series, and the challenge of creating relevant and authentic IPE events and activities that serve the learners with significantly different backgrounds and career intentions.

P4-73. Preparing for Effective Patient Transitions: A Collaborative Transitional Practicum

- Pamela Forte, Quinnipiac University, Hamden, CT, USA
- Joanne Roy, Midstate Medical Center, The Hospital of Central Connecticut, Meriden, CT, USA
- Angela Carrano, Quinnipiac University, Hamden, CT, USA
Submitted abstract:

**Background:** Effectively transitioning patients between various levels of care supports high quality and safe patient outcomes. The Future of Nursing: Leading Change, Advancing Health (Institute of Medicine (IOM), 2010) recognizes nurses’ ability to reduce gaps in care and provide patients with more coordinated, team-based care. The American Association of Colleges of Nursing’s Essentials of Baccalaureate Education (2008) describes the baccalaureate graduate nurse as being prepared to care for patients not only across the lifespan, but also across the continuum of healthcare environments. This innovative, clinical practicum incorporated leadership, inter-professional collaboration, and teamwork to advance nursing students’ understanding of patients’ experiences and transitions in the healthcare system.

**Objectives:** The objective was to elicit student perceptions of the nurse’s role in patient care transitions.

**Methods:** A unique twelve week clinical practicum was developed in an academia-practice partnered initiative for eight senior nursing students. Students’ clinical assignments were based on patient populations that were identified as having multiple transitions along their health care trajectory and recovery. Preceptors in the acute care areas established the foundation of the practicum. Students followed their patient populations in pre-admission and post-discharge experiences.

**Results:** Two distinct themes emerged from the student comments: patients’ care experiences and communication among the inter-professional team. Preliminary findings indicated an appreciation and understanding of the patient experience, inter-professional collaboration, and the nurse’s unique contributions to providing effective care coordination with opportunities to facilitate successful patient outcomes.

**Implications:** Increased acuity and patients with multiple chronic health conditions have heightened the awareness for nursing students to be well prepared for facilitating effective transitions of care. To promote a future where effective care is rendered with safe transitions, nursing education and practice settings should partner to provide these opportunities for nursing students prior to their entry into their first professional practice role.

**P4-74. Students’ views of service users/patients and carers leading interprofessional education**

- Jenny Ford, De Montfort University, Leicester, UK
- Elizabeth Anderson, University of Leicester, Leicester, UK

Submitted abstract:

**Background:** There is strong agreement on the value of meaningful involvement of service users and carers in professional education; however care is needed to progress this work. We have worked with service user across our interprofessional education (IPE) curriculum. We are exploring ways to offer leading roles to service users.

**Objectives:** Since 2005 service users and carers were part of action research to design and deliver the ‘Listening Workshop’, an IPE event. This research identified that some service users could progress into leading roles. We recently investigated the views of students.
**Method:** This was a qualitative study design. A sample of students took part in interprofessional focus groups after attending the Listening Workshop. The audio-taped discussions were transcribed and analysed for themes.

**Results:** A total of 40 students took part (midwives n=4, SLT n=3, nurses n=8, medical students n=18, SWs n=7). There were three clear themes within the data. i) Service users have the right to leading roles; ii) Uncertainty about service users taking on these roles, and; iii) Agreement that training would be required. Several sub-themes were apparent, as students explored their reactions to service user involvement. A striking sub-theme was the idea of a ‘balance’ needed between students’ needs and the service user’s perceived agenda and between the validity of the service user voice and the need for a trained tutor.

**Implications:** Students agree about the validity of service user involvement. There is cautious agreement that service users have the right and ability to take on leading roles in the Listening Workshop, with support and training. Students will need preparation to accept such new roles for service users. We have now trained service users who, in autumn 2013, commenced employment as ‘Co-tutors’, teaching alongside academics, or ‘Mentors’, recruiting and supporting other users at this event.

**Author Biographies**
Jenny Ford worked as a speech and language therapist specialising in children with complex needs before joining De Montfort University to work in pre-registration speech and language therapy education. She has been a key member of the regional Strategic group developing IPE for pre-registration students. She is Operational IPE Lead in the faculty of Health and Life Sciences at De Montfort, a CAIPE Board member and one of the co-ordinators of the CAIPE Student Network.

Liz Anderson, from an early clinical career (nurse, midwife and health visitor) has led innovations in medical education and led the design of an IPE curriculum shared by three universities, in S. Midlands, UK. She is a National Teaching Fellow. She has served on several national boards for the enhancement of professional education (including CAIPE) and has published widely on IPE.

**P4-75. Practice-based interprofessional learning for medical and pharmacy students to ensure safe prescribing in the elderly**

- **Neena Lakhani**, De Montfort University, Leicester School of Pharmacy, Leicester, UK
- **Elizabeth Anderson**, University of Leicester, Leicester, UK
- **Susanne Dawson**, University Hospitals Leicester, Leicester, UK

**Submitted abstract:**
**Background:** Safe prescribing for elderly patients with co-morbidities remains challenging. We report on a two year evaluation study to enable fourth year pharmacy students to learn together on acute hospital medical wards with final year medical students.

**Objectives:** The study aimed to increase pharmacy student’s access to in-patients and enhance safe prescribing for polypharmacy in the elderly. Student small teams were prepared in a classroom for their half- day ward placement. Students worked alongside the clinical team with in-patients to analyse patient’s experiences and understanding of their medications and the accuracy of the current prescription. Students presented their analysis to the clinical team on the following day so that concerns were fed-back to the clinical units for action.
**Method:** The mixed methods study included i) student pre and post evaluation questionnaire (scored and free text questions); ii) student analysis (presentations); iii) student feedback forms to the ward teams. Qualitative data on the student questionnaires was analysed using thematic analysis and the case study presentations using content analysis. Scored questions were analysed using SPSS.

**Results:** We report on 384 students, (222 medical, 162 pharmacy). All students gained knowledge relating to their learning outcomes (P<0.01). The themes from the free text comments stated that they learnt more about polypharmacy, roles and role overlap within ward-based prescribing, gained confidence to recognise and address polypharmacy and valued the interprofessional communication between students, patients and the ward clinical team. The students worked with over 100 in-patients of which minor and major drug issues were identified in 73 cases which included both clinical and medicines code issues.

**Implications:** Students highly valued this learning which advanced safe front-line care. The learning has been placed within the IPE curriculum and is offered to small number of students (n=45) across ten wards every eight weeks throughout the year.

**Author Biographies**
Neena Lakhani is a senior lecturer in clinical pharmacy and pharmacy practice. She is also a practicing pharmacist and Chair of the Leicestershire and Rutland Pharmaceutical Committee. She has trained and worked in hospital, community and primary care settings. She firmly endorses that IPE is integral to providing a ‘fully integrated, patient centred service’ in the modern NHS.

Liz Anderson, from an early clinical career (nurse, midwife and health visitor) has led innovations in medical education and led the design of an IPE curriculum shared by three universities, in S. Midlands, UK. She is a National Teaching Fellow. She has served on several national boards for the enhancement of professional education (including CAIPE) and has published widely on IPE.

Suzanne Dawson graduated from Leicester Medical School in 1991 not really knowing what to do. When Calman training was introduced in 1998 had to make a definitive decision and plumped for Geriatrics, as it was the only remaining truly general hospital based speciality. Is passionate about raising the profile of Geriatrics, especially with the changing demographics of the UK, and hopes that she can inspire students that will happen as a consequence.

P4-76. “Reaching our potential”: The impact of postgraduate interprofessional education (IPE)

- Caroline Morris, University of Otago Wellington, Wellington, New Zealand
- Eileen McKinlay, University of Otago Wellington, Wellington, New Zealand
- Sue Pullon, University of Otago Wellington, Wellington, New Zealand

**Submitted abstract:**
**Background:** The World Health Organisation has acknowledged interprofessional collaboration as key in mitigating risk associated with globally looming health workforce crises. Effective interprofessional collaboration, and ultimately improved health outcomes, need to be underpinned by effective IPE.
**Objectives:** Since 2001, IPE has been the focus of our postgraduate programme, available to the primary healthcare workforce nation-wide. We sought to identify the perceived value and impact of IPE for selected students.

**Methods:** Individual programme papers cover a selection of primary care topics, grounded in the Department’s empirical research, that are likely to be highly relevant to a range of healthcare professionals. All paper aspects are underpinned by IPE theory, thereby supporting interprofessional teamwork and communication; principles that can be readily translated into clinical practice. Demonstration vignettes were undertaken to investigate the impact of IPE on students.

**Results:** Students enrolled from 2009-2013 (n=231) were of varying age, and from diverse geographical locations and professional backgrounds (n=11). Students from general practice, nursing, pharmacy and allied health indicate the positive impact of IPE in their daily work.

**Implications:** Our student cohort has not been exposed to IPE pre-registration; this is therefore a new formal learning experience for them. Students learn in an interactive and relational way “with, from and about” each other. The importance of an explicit team-based interdisciplinary approach to primary care cannot be underestimated - “The days of the brilliant solo operator in medicine are gone ... the ability to be a team player is essential ... for the benefit of patients.”

**Author Biographies**

Caroline Morris is a pharmacist by background and a senior lecturer in primary health care in the Department of Primary Health Care and General Practice University Otago Wellington. She co-convenes an interprofessional postgraduate paper in primary health care. Caroline’s research interests include the role of community pharmacy in primary health care, gout management and interdisciplinry health care, and quality indicators in primary care.

Eileen McKinlay is a nurse by background and a senior lecturer in primary health care in the Department of Primary Health Care and General Practice, University Otago Wellington. Eileen is an interprofessional educator and teaches in undergraduate interprofessional and medical programmes (long-term conditions management) and in similar interprofessional postgraduate papers. Her research interests include the outcomes of interprofessional education both in under and postgraduate programmes, building interprofessional teaching practice, interdisciplinary primary care.

Sue Pullon is a general practitioner, Associate Professor and Head of Department, Primary Health Care and General Practice, University Otago Wellington. She has been teaching interprofessional postgraduate programmes in primary health care and sexual and reproductive health for more than 10 years and also leads a rural interprofessional undergraduate programme for final year dental, nursing, dietetic, physiotherapy, medical and pharmacy students in a remote rural area in Tairawhiti region.

**P4-77. Health professional degree programmes: governance and opportunities for interprofessional education in NZ**

- Sue Pullon, University of Otago Wellington, Wellington, New Zealand
- Eileen McKinlay, University of Otago Wellington, Wellington, New Zealand

**Abstract submitted:**

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**Background:** Interprofessional practice optimises the use of multiple skill sets to provide best possible care for patients to improve health outcomes and patient satisfaction. Key interprofessional competencies include effective, respectful communication, ability to work in teams, successful conflict resolution, shared decision-making, and active collaboration with patients and families. Interprofessional education (IPE) is one key way to prepare health professional students for interprofessional collaborative practice.

**Method:** Building on our postgraduate IPE experiences, we have been well placed to a) develop an in-house, UOW IPE component for medical, physiotherapy and dietetic students, and b) lead a rural, clinically-based interprofessional immersion programme, from the Department of PHC&GP in Wellington. Key trends and results will be presented from these two different programs to date.

**Results:** Both programmes have brought staff from different health disciplines together with a common goal, enabled valuable shared learning, and developed interprofessional teaching skills. Overall, students have had positive experiences engaging in IPE, but course design, delivery and assessment is complex. Collaborative, interdisciplinary governance is essential for continued cross-disciplinary engagement. Lack of curricular alignment across disciplines is problematic.

**Discussion:** The University of Otago has well-established degree programmes in dentistry, dietetics, medicine, pharmacy and physiotherapy; mostly within the Division of Health Sciences under a common governance structure. Our experience in IPE for undergraduates indicates good interdisciplinary governance as key to a sound Division-wide framework for shared learning. Key discussion point for roundtable discussion: A new innovative governance structure gives considerable opportunity to design and deliver innovative high quality IPE across several health professional programmes – what are the essential features of interdisciplinary institutional governance required to realize such potential?

**P4-78. Enhancing Reflective Writing in IPE Learning Activities Using Small Group Review Sessions**

- **Sharona Kanofsky,** University of Toronto, Physician Assistant Program, Toronto, ON, Canada
- **John Shea,** Northern Ontario School of Medicine, Thunder Bay, ON, Canada

**Submitted abstract:**
**Background:** Physician Assistant students at the University of Toronto participate in a required IPE curriculum among eleven health profession programs. PA students are required to submit written reflections following three core learning activities in clinical rotations. These activities include participating in team meetings; shadowing/interviewing team members; and participating in team education. In 2013 PA students were further required to participate in two facilitated group discussions during on-campus academic blocks. These small group discussions focused on sharing individual IPE learning experiences and identifying common themes and key learning points.

**Objectives:**
- Describe a method used to enhance individual written reflection as a formative assessment in IPE
- Identify IPE-related learning opportunities using small group facilitated interactions
Methods: During the clinical year, PA students return to Toronto for academic blocks following clinical rotations. Prior to this, students are required to submit reflections on their IPE activities in clinical rotations. Groups are composed of 5-6 students. Each group session lasts 30 minutes. The facilitators prepare by reviewing the reflections. Students are asked to present a short 2-3 minute summary of their own reflections to the group. Facilitators advanced the conversation by identifying common themes and key elements.

Results/Implications: Reflective writing is an effective strategy for summative assessment. It allows students to deepen learning experiences by identifying meaning and purpose. This small group review of reflective writing allows students to further enhance this learning by sharing their experiences with a group of peers following a period of consolidation of learning. It further allowed the group to identify common themes and key elements in IPE. Informal feedback indicated that students are satisfied with this learning activity. Further work can be done with formal session evaluations of this activity in future years.

Author Biographies
Sharona Kanofsky is a US- and Canadian-certified Physician Assistant and full-time faculty in the Faculty of Medicine, University of Toronto, with a Masters in healthcare education. She is the PA program academic coordinator and part of the program design team. She sits on the Interfaculty Curriculum Committee, working on IPE assessment. She has worked clinically as a PA in geriatrics; most recently at Baycrest Hospital as part of an Ontario PA demonstration project.

John Shea is a Canadian trained and certified Physician Assistant, employed as a full time Clinical Coordinator for the U of T BScPA Program. He is Faculty at the Northern Ontario School of Medicine and has been involved in PA education since 2001 and has been a member of an interdisciplinary team developing and delivering preceptor 101 type educational sessions. John is a retired Canadian Forces member who has been deployed around the world.

P4-79. Interprofessional socialization-based IPE Program; a new approach in preparing health professional students/providers for collaborative practice

- Hossein Khalili, Fanshawe College, London, ON, Canada
- Carole Orchard, Western University, London, ON, Canada
- Heather Laschinger, Western University, London, ON, Canada
- Randa Farah, Western University, London, ON, Canada

Submitted abstract:
The mandate of IPE is to prepare health professional students/providers for collaborative practice (CP). CP requires partnership, shared decision-making and power-sharing amongst cross-disciplinary health professionals.

Currently, the main focus of IPE programs has been to improve knowledge/skills and attitude of learners towards CP. However, according to the social identity and intergroup contact theories, just improving knowledge/skills and attitudes of learners may not be sufficient to change the health care towards CP. Turf-protection behaviors and fear of identity loss that are deeply rooted in the uniprofessional socialization of health professionals have caused individuals to view IPE as a threat to their professional identity, hence demonstrating resistance towards CP. For IPE to be effective, IPE should expand its focus to encompass interprofessional socialization (IPS) and dual professional & interprofessional identity. IPS
and dual identity will assist learners to maintain the integrity of their professional boundary/identity, and on the other hand to be able to value/celebrate the diversity and synergy of CP teamwork.

In this presentation the findings/implications of a mixed method quasi-experimental study of assessing the impact of an IPS-based IPE program on interprofessional socialization and dual identity development among students from seven different health professionals including medicine, nursing, food & nutrition, occupational therapy, physical therapy, social work and speech language pathology will be presented.

**P4-80. The application of Clinical Simulation Practice to improve interprofessional collaboration in real life professional practice**

- Hossein Khalili, Fanshawe College, London, ON, Canada
- Helen Harrison, Fanshawe College, London, ON, Canada
- Lorie Ranieri, Fanshawe College, London, ON, Canada
- Karen Katsademas, Fanshawe College, London, ON, Canada

Submitted abstract:
There is increasing pressure from regulatory bodies to ensure the preparedness of future healthcare providers for collaborative practice. The purpose of this study was to assess the impact of clinical simulation practice (CSP) on the competence, confidence, and collaborative practice of Bachelor of Science Nursing (BScN ) and Practical Nursing (PN) students in their future clinical practice. A mixed method approach with a time series quasi-experimental design was employed. Using convenience sampling, data were collected from 96 students in the BScN (n=55) and PN (n=41) programs utilizing three scales: self-efficacy, self-assessed competency, and dual identity scale. Quantitative data were analyzed using descriptive and inferential statistics including t-test and MNOVA. Qualitative data were analyzed using thematic content analysis. The preliminary findings supports the impact of CPS as a supplement to clinical placement in helping students significantly improve their competence, confidence and collaboration in their real practice by bridging the gap between theory and practice. The findings of this study providing some evidence to support the blended approach of balancing simulation and clinical experiences that could have a great impact on preparing the new generation of practitioners to effectively practice and provide care to the geriatric population.

**P4-81. Interprofessional Education Course Assignment: Undergraduate Students Perspectives’ about Caring Responses and Decision-Making Skills related to Patient-Centered Care**

- Verna Hendricks-Ferguson, Saint Louis University, School of Nursing, Saint Louis, MO, USA
- Darina Sargeant, Saint Louis University, Doisy College of Health Sciences, St. Louis, MO, USA
- Irma Ruebling, Saint Louis University, The Center Interprofessional Education & Research, Saint Louis, MO, USA
- Rebeccca Banks, Saint Louis University, College for Public Health & Social Justice, Saint Louis, MO, USA

Submitted abstract:
**Background and Significance:** For health professionals to deliver ethical and empathetic patient care as a team, they must first develop an understanding of patient-centered care principles, such as appropriate caring responses and decision-making skills and the role and contributions of other health care professionals. Examples of patient-centered care characteristics include: respect of patients’ values, preferences; integration of cultural competency and health literacy; self-management skills; physical
and emotional support; and health-care access.

**Objectives:** The major study aim was to evaluate undergraduate interprofessional education (IPE) students’ perspectives about health professionals’ use of caring responses and decision-making skills.

**Methods:** A descriptive qualitative design was used to analyze undergraduate students’ reflection assignments. Data was retrieved from students’ reflection assignments collected over two semesters during an IPE course at Saint Louis University. Reflection assignments were designed to capture students’ perspectives about: (a) caring response attributes used during communication with patients, family members, and health care providers; (b) future use of acquired decision-making skills, and (c) future use of acquired interprofessional communication skills. Preparation of reflection assignments for analysis included: removal of personal identifiers, random-number assignment, and documentation of students’ health profession. Students’ assignments were randomly selected using a stratified sampling plan to ensure equal representation of students’ health profession.

**Results:** A total of 42 randomly assignments from 275 IPE students enrolled in the course during 2011 and 2012. Six health professions are represented in the students’ reflection assignments. Analysis revealed four themes related to interprofessional caring responses and decision making skills.

**Implications:** Our results provide evidence to support the tenet that through interprofessional education, students can develop: (a) an understanding of patient-centered care and decision-making skills, (b) respect for other health professions contributions, and (c) a commitment to promote caring interactions with other health professionals and use caring responses with patients and family members.

**P4-82. The effectiveness and challenges of a joint project in interprofessional education**

- Norie Obu, Saitama Prefectural University, Koshigaya, Saitama, Japan
- Yuji Katsuki, Nippon Institute of Technology, Minami-Saitama, Saitama, Japan
- Osamu Hosoya, Josai University, Sakado, Saitama, Japan
- Sachiko Takahashi, Saitama Medical University, Iruma, Saitama, Japan

**Submitted abstract:**
The present study reports the effectiveness and challenges of the interprofessional team training implemented as a joint education project of four universities in Saitama, Japan. This interprofessional team training was conducted as a trial project in a collaborative course of interprofessional education. A third-year medical student, a third-year nursing student, a fifth-year pharmacy student, a third-year nutrition student, and a fourth-year architecture student had a three-day interprofessional training at an acute hospital. In this training, students made a care plan for the patient who developed COPD and stayed in the hospital.

The students wrote about their training on a reflection sheet every day at the end of the training to reflect on their behavior and group activity for the day. From the five students’ reflection sheets, we derived 117 sentences. We conducted a participant-observer study and analyzed descriptions on the reflection sheets and the electronic bulletin board in a qualitative method. The sentences were classified into 20 categories based on the goals of this interprofessional training.
The categorized data showed that the focus of students’ reflections changed from understanding the patient and self-questioning to ways to collaborate with peers. In addition, it was demonstrated that the students became aware of ways to develop mutual understanding and knowledge effectiveness in the interprofessional setting, while they faced difficulties due to lack of knowledge and experience in their discipline. It was suggested that the participants of the interprofessional training needed communication skill training to transcend the boundaries of their specialties as well as opportunities to deepen their mutual understanding in the introductory phase of interprofessional education.

**P4-83. The Virtual Community Clinic Learning Environment: A Web-Based Approach to Interprofessional Education**

- **Pamela Reis**, East Carolina University, College of Nursing, Greenville, NC, USA

Submitted abstract:
There are many challenges in the education of interprofessional health care students. One that is of significant import is scheduling learner activities face-to-face, at the same time, and in the same place. One way of addressing scheduling challenges is to offer online interprofessional education activities that allow students to participate in team-based, critical reasoning through web-based technology. This poster describes our experience utilizing the Virtual Community Clinic Learning Environment (VCCLE) for nurse-midwifery and medical students to promote interprofessional learning in the culturally and linguistically appropriate primary care of women throughout the lifespan. The VCCLE, created by the Instructional Technology faculty at East Carolina University is a web-based, asynchronous, immersive clinic environment into which students enter to “meet” and interact with instructor-controlled virtual patients and preceptor avatars. In the VCCLE, students interview patients and move through a classic diagnostic sequence to arrive at a diagnosis, impression, and plan of care for each patient. Students must choose the correct questions to “ask” the patient avatar in order to formulate the correct assessment and management plan. Rationales and feedback for correct and incorrect answers are provided to the student during each step of the diagnostic sequence. The VCCLE is composed of two functional parts, the clinic environment (graphics side), and the case builder (programming side). Instructors use the case builder to create cases targeting specific health and sociodemographic issues, which is then presented as a virtual patient to students through the VCCLE framework. The VCCLE features a text-to-speech (TTS) engine allowing for text input by the case builder to be converted to sound files. The result is that the patients and preceptors audibly speak their answers and feedback to students. The TTS engine supports multiple languages. Additional features of the VCCLE include the ability to upload multimedia files, a billing and coding framework to allow students to see the financial implications of their management decisions, and a select-a-model feature that allows case builders to choose from a multicultural library of patient avatars. We have extended case building opportunities to nurse-midwifery and medical students in order to foster team work and collaborative learning as they work together to create virtual patient cases under the direction of faculty. The VCCLE online simulations allow for a standardized approach to learning professional competencies and for evaluation of interprofessional student learning. Process and outcome evaluation of this pedagogical approach includes pre-and post-activity survey data measuring the Interprofessional Education Collaborative Expert Panel (2011) four core interprofessional domains (values/ethics, roles and responsibilities, interprofessional communication, teams and teamwork) that are linked to the five IOM core competencies for all health professionals.
P4-84. Impact of Patients as Co-Educators in Collaborative Practice IPE Workshops at Université de Montréal (UdeM)

- Marie-Claude Vanier, Université de Montréal, Montréal, QC, Canada
- Vincent Dumez, Université de Montréal, Faculty of Medicine, Montréal, QC, Canada
- Isabelle Brault, Université de Montréal, Montréal, QC, Canada

Submitted abstract:

**Background:** Patient-centered care is widely promoted. UdeM currently teaches the concept of partnership in care, which further engages the patient in his own care process. Patients’ contribution to teaching can facilitate understanding of this concept. We will report on students’ appreciation of patients---as---trainers’ involvement in 3h---workshops, in three IPE courses, combining students from 13 different professions. Workshops were co---lead by a patient and a health professional. CSS1900 workshop involved groups of 50 first year students and aimed at discovering different professions and partnership in care concept. Students reflected on partnership through their own experiences, a video testimony and the patient’s own story. CSS2900 and CSS3900 workshops involved small groups (n=11) of 2nd and 3rd year students discussing case---studies aiming at role clarification and production of an interprofessional care plan.

**Objectives:** 1) Evaluate the impact of patients---as---trainers in IPE workshops. 2) Compare different workshop formats using patients---as---trainers.

**Methods:** Patients were selected according to specific criteria and trained before the workshops. Their role was to share experiential knowledge and give students feedback. Students completed online appreciation questionnaire with 5---point Likert scale and open----ended questions.

**Results:** This abstract describes 2012---2013 data. New data for the year 2013---2014, with expanded involvement of patients, will be presented at the conference. Questionnaires were completed by, 1056 students (84%) for CSS1900, 666 students (80%) for CSS2900 and 404 students (80%) for CSS3900. Amongst key findings, most students agreed or totally agreed that patient’s participation in the activity: 1) was relevant (CSS1900=89,8%) (CSS2900=85,5%) (CSS3900=93,0%) and; 2) Increased importance they gave to case---study patient’s point of view during discussions (CSS2900=78,0%) (CSS3900=82,7%). After workshop CSS1900, 94,1% of 1st year students considered integrating concepts of partnership in care in their future practice.

**Conclusion:** Participation of patient---as---trainers is relevant, feasible and fostered a better understanding of partnership in care approach amongst students.

**Author Biographies**

Marie--- Claude Vanier, B. Pharm., M.Sc., is Associate Clinical Professor at the Faculty of Pharmacy of Université de Montreal. She is chairing the Interfaculty Operational Committee developing and managing the IPE undergraduate curriculum on collaborative practice. She is also a clinical pharmacist at the Family Health Team Teaching Clinic of Cité de la Santé de Laval.

Vincent Dumez, M. Sc., is a patient living with three chronic diseases, highly trained in management and organizational transformation. He is Director of the Patient Partnership Expertise Group at the Centre for Applied Pedagogy in Health Sciences of the Faculty of Medicine of Université de Montréal.
P4-85. Implementation of Interprofessional Learning Activities in Professional Disciplinary Practicum: Barriers and facilitators

- Isabelle Brault, Université de Montréal, Montréal, QC, Canada
- Therriault Pierre-Yves, Université du Québec à Trois-Rivières, Trois-Rivières, QC, Canada
- Louise St-Denis, Université de Montréal, Montréal, QC, Canada
- Paule Lebel, Université de Montréal, Montréal, QC, Canada

Submitted abstract:

**Background:** The rising prevalence of chronic diseases and population aging have led healthcare professionals to increase collaboration to respond better to patient and family needs. Aiming to prepare future healthcare professionals to collaborate effectively, many universities have developed Interprofessional Education (IPE) programs. Up to now, these programs have been mostly courses or clinical simulation experiences where students share professional expertise and learn collaborative skills. Few attempts have been made to pursue IPE in healthcare clinical settings where students and professionals work together to offer healthcare services and develop core collaboration competencies.

**Objectives:** This conference has two objectives: 1) to present the results of a pilot project in which interprofessional learning activities (ILA) were implemented during a professional disciplinary practicum, and 2) to explore implementation barriers and facilitators.

**Methods:** We conducted a pilot study between January and April 2012 in four healthcare settings: two hospitals, one rehabilitation centre and one primary care centre. Our analysis is based on focus group interviews with four categories of participants: trainees, clinical supervisors, ILA coordinators and education managers.

**Results:** The implementation process followed numerous steps which include training sessions for clinicians, identification of interprofessional learning activities based on current professional practices and student assessment. For the trainees, the experience led to better clarification of roles and the recognition of specific expertise, and ILA enabled them to develop collaboration competencies during their clinical practicum. Overall, ILA contributed to the teams’ professional development.

**Conclusion:** Despite some difficulties related to ILA, the results strongly support their relevance and the value of promoting professional exchanges between students of different professions, both in academia and in the clinical setting.

P4-86. CONVERGENCE: The iterative development and implementation of a first-year curriculum for interprofessional learning in a health science center

- Kimberly Krumwiede, University of Texas Southwestern Medical Center, Dallas, Texas, USA
- Angela Mihalic, University of Texas Southwestern Medical Center, Dallas, Texas, USA
- Kristine Kamm, University of Texas Southwestern Medical Center, Dallas, Texas, USA

Submitted abstract:

**Background:** UT Southwestern Medical Center acknowledged the importance of interprofessional education (IPE) early in the health care education process and developed Convergence, an IPE initiative incorporating learning communities across its medical, health professions and graduate schools.
Goals/Objectives: The goals of this IPE educational model are to develop, implement and assess activities to 1) improve understanding of and respect for the roles of other health and biomedical professionals, 2) enhance interprofessional communication, and 3) increase knowledge of effective teamwork.

Methods: A learning community model is used including small groups and coordinated schedules within each school, and joint sessions with interprofessional small groups and facilitators. Annually students and faculty participate in Convergence Day, an afternoon focused on a theme. Activities include small-group discussion of a family case study, a “science-of-medicine” fair, and a keynote address. An interprofessional implementation planning committee meets monthly throughout the year for planning and evaluation. The iterative process includes annual formative assessment based on participant surveys and pre- and post-data.

Results: After four years, the curriculum has evolved based on feedback: 1) Expansion of the theme-based case study based on repeated positive student feedback. 2) Gradual change in number of joint sessions based on positive feedback from students and facilitators. 3) Gradual synchronization of course schedules to accommodate student and faculty feedback for increased IPE activities. Attitude gains: Significant improvements were seen in several categories after Convergence activities (p values: 0.001-0.033).

Implications: This presentation will describe an institutional IPE model for potential adoption by other institutions. IPE curriculum requires cycles of implementation, feedback and adjustment. In addition, strong institutional commitment and collaboration among schools within an institution are critical for success.

P4-87. Teaching and Education Achieving Collaboration among Health Professionals: The TEACH Study

- Giavanna Russo-Alvarez, Cleveland Clinic, Cleveland, OH, USA
- Patricia Klatt, UPMC St. Margaret, Pittsburgh, PA, USA
- Stephen Wilson, UPMC St. Margaret, Pittsburgh, PA, USA

Submitted abstract:
Objective: Patient-centered medical homes (PCMH) and interdisciplinary care teams have been shown to improve care coordination, increase patient access to care, improve patient outcomes, and decrease health care costs. Pharmacists and physicians are often core team members, with the key to model’s success being effective collaboration. Interdisciplinary education fosters a better understanding of other discipline’s training, expertise, and role in patient care. The purpose of this study is to explore and assess the effect of unique relationships developed between the physician and pharmacist graduates of the UPMC St. Margaret Faculty Development Fellowship and how that translates into clinical practice.

Methods: A qualitative research study involving twenty to thirty minute, one-on-one interviews with physician and pharmacist graduates of the interdisciplinary faculty development fellowship were conducted. The interviews were led by one pharmacist who is a previous graduate of the interdisciplinary fellowship. All interviews were audio-recorded and transcribed verbatim. A thematic analysis based in Grounded Theory was conducted. Two reviewers developed thematic codes consistent with the study objective and field guide and results were organized into overall themes and physician and pharmacist themes.
**Results:** A total of 22 interviews were conducted: 12 physicians, 10 pharmacists. Three overall themes resulted, including increased insight into physician and pharmacist training and perspective; perceived improvement in performance as a clinician-educator; and perceived improvement in performance as a clinician. Specific physician themes included increased awareness of the capabilities and assets of working with clinical pharmacists and increased likelihood of engaging and collaborating with pharmacists. Pharmacist themes included increased ability to build collaborative relationships with physicians and increased marketability.

**Conclusion:** Both pharmacist and physician participants felt the interdisciplinary faculty development fellowship was a positive experience. Understanding the benefits of interdisciplinary fellowship training may help to support further physician-pharmacist collaborative training. Additionally, physician-pharmacist collaborative training may improve clinical outcomes.

**P4-88. Enhancing participation in structured Interprofessional Education clinical experiences for students and staff: A theme-based approach**

- Debbie Rolfe, University Health Network, Toronto, ON, Canada
- Tracy Paulenko, University Health Network, Toronto, ON, Canada
- Nancy Boaro, University Health Network, Toronto, ON, Canada
- Karen Cameron, University Health Network, Toronto, ON, Canada
- Mandy Lowe, University Health Network, Toronto, ON, Canada

**Submitted abstract:**

**Background:** Each year our academic teaching hospital hosts over 5000 students in profession-specific clinical education experiences. These experiences vary in length (3 to > 52 weeks) and may occur at any time during the year. Structured interprofessional education (IPE) student clinical placements occur in a specific clinical area (e.g. cardiac, neuroscience) over four weeks. Differing placement timing provides challenges in coordinating student IP groups who are on the same unit over the same four-week period. To maximize participation and optimize diversity of the student interprofessional groups, a time-limited, structured IPE clinical experience was designed to meet the academic criteria of traditionally structured IPE clinical placements.

**Objectives:**

- To design a modified version of structured IPE clinical placements to enhance participation of students from across professions
- To pilot and evaluate the modified structured IPE clinical placement to inform future iterations

**Methods:** A newly-formed IP working group designed a modified IPE clinical experience for students based on best practice criteria (e.g. learning outcomes, orientation session, IP co-facilitated tutorials, group presentation). Drawing on the group’s collective IPE expertise, a theme-based IPE clinical experience was created to enhance student and staff participation from across professions. A “transitions in care” theme (e.g., shift changeovers, acute care to rehabilitation) was explicitly chosen to broaden accessibility. This theme was used to pilot and evaluate the modified IPE clinical experience.

**Results:** Preliminary findings of the pilot will be presented (e.g. participation rates, profession representation, changes in perception to interprofessional collaboration, qualitative evaluation).
**Implications:** To facilitate the goal of educating health care students as competent interprofessional collaborative care providers, it is imperative that as many students as possible have the opportunity to engage in clinical IPE experiences. Furthermore, opportunities for dialogue between students and staff foster mutual growth in interprofessional collaboration and life-long learning.

**Author Biographies**
Debbie Rolfe has a clinical background in social work and bioethics and is currently undertaking doctoral studies with the Lawrence S. Bloomberg Faculty of Nursing at the University of Toronto in the collaborative program in Bioethics. She is also one of the Interprofessional Care and Education Leaders at the University Health Network. Debbie’s clinical and research interests lie in the fields of maternal, infant reproductive health; feminist ethics; narrative medicine; and values based clinical practice.

Tracy Paulenko has a clinical background in physical therapy and is one of the Interprofessional Education/Care & Professional Development Leaders at University Health Network. She is a status appointed clinical instructor in the Department of Physical Therapy and is currently pursuing her master’s degree in the Graduate Department of Rehabilitation Science, University of Toronto. Tracy’s research interest is in interprofessional decision making in hypertonicity management.

**Student Posters**

**P2-51. The Cure PSP Care Guide: A Telephonic Nursing Intervention for Individuals and Families Living with PSP**

- Susan Rebecca Dunlop, Towson University, Towson, MD, USA
- Vicky Kent, Towson University, Towson, MD, USA

**Submitted abstract:**
Progressive Supranuclear Palsy (PSP) is a rare, progressive, and terminal neurodegenerative disease occurring slightly more frequently than ALS. The seven to ten year course of the illness is characterized by problems with ambulation, balance, mobility, vision, speech, swallowing, and behavior. The individuals and families living with PSP represent a vulnerable population, marginalized due to the prevalence of the disease, lack of provider knowledge, and limited resources. Substantial evidence in the nursing literature supports the benefits of patient education, self management, chronic disease management, telehealth, and nurse navigation programs which enhance patient and caregiver knowledge, improve day to day management by developing an awareness of resources, decrease dependence on services, and address caregiver needs.

The Cure PSP Care Guide nursing intervention uses telehealth to remotely provide knowledge and resources to individuals in the Midwest from the offices of Cure PSP in Timonium Maryland. During the course of two phone calls, individuals and their caregivers are assessed in order to develop a Cure PSP Care Guide designed to provide guidance along the trajectory. A knowledge assessment, self efficacy scale, and caregiver strain index are administered prior to and after the intervention to determine the efficacy.

The preliminary quantitative and qualitative data collected on this project further justifies the use of telehealth to remotely deliver nurse case management and navigation services to the vulnerable individuals and families living with PSP. The remote delivery of services using technology such as the phone is an effective way to provide knowledge and resources in the setting of a rare disorder.
P2-52. Interprofessional Sensemaking: A Model to Inform Practice

- **Stephanie Fox**, Simon Fraser University, School of Communication, Vancouver, BC, Canada

**Submitted abstract:**

**Background:** Interprofessional practices are consequential to patient safety and to the effectiveness and efficiency of care. Insights into how practices are collectively accomplished can help us better understand this relationship.

**Objectives:** The overall objective of this research was to identify variation in collective sensemaking on interprofessional teams in terms of their sociomaterial communicative practices. One goal was to specify how the practice of interprofessional teamwork emerges in and through communicative practice.

**Methods:** This 6-month ethnography of 4 acute care teams in a Canadian hospital employed non-participant observations, interviews, and audio recordings. Coded field notes were analyzed for recurrent matters of concern. Transcribed interactions were analyzed using techniques from conversation and narrative analysis in organizational communication, looking at how members negotiate matters of concern in their accounts about the patient, a process termed interprofessional sensemaking.

**Results:** Patient case reviews ranged from updates to extended and diachronic episodes of collective problem-solving; sensemaking work was most evident in the latter. The study resulted in a model of interprofessional sensemaking that depicts practice components consequential to how the patient case review is collectively accomplished. These include (a) the role of focused, comprehensive introductions in establishing points of reference that cue and direct sensemaking; (b) the activation of documentary supports in practice (interplay between the oral and the written); and (c) the expression of uncertainty as trigger for sensemaking episodes. Charge nurse reliance on daily notes was found to play a key gatekeeping role in collective sensemaking, both in single instances and over time.

**Implications:** This application of social theory illustrates how communicative practices writ large are the site and the process of interprofessional sensemaking. Next steps for research would include a focus on the links between nursing documentation practices, interprofessional teamwork, and continuity of care.

P2-53. Learning Method For Interprofessional Education In Indonesia: A Qualitative Study From Perspective Of Teachers And Students

- **Mawar Putri Julica**, Bangka Belitung Provincial Hospital, Pangkal Pinang, Bangka Belitung, Indonesia

**Submitted abstract:**

**Background:** Learning together for health professional student is a foundation to provide better health in the future. Interprofessional education (IPE) prepares upcoming healthcare professional from various health disciplines by learning from, with and about each other to improve the quality of patient care. Learning method is one of the supporting components in organizing the interprofessional education. Indonesia has not clearly implemented IPE but many collaboration methods have been introduced in some universities. This article explores learning method for IPE in Indonesia from the perspective of teachers and students from multi-campus health profession in Indonesia.
**Objective:** This research was to explore suitable learning method for IPE according to health professional teachers and students in Indonesia.

**Method:** This study was a qualitative research using an exploratory case study approach. Student and teacher who has a good perception about IPE from medical, pharmacy, dental, nursing, dietitian, public health, and midwife divide into seven groups taken separately. Instrument used to measures the good perception for student were the Interdisciplinary Education Perception Scale (IEPS) questionnaire and The Readiness for Inter professional Learning Scale (RIPLS) questionnaire IEPS has tested for reliability and validity. FGD was conducted on 196 students and 49 teachers from two different cities. All data analyzed by an inductive thematic approach.

**Result:** The data showed that students had more ideas and alternative learning methods for IPE compared to the teachers. Both students and teachers had good knowledge about collaboration method. Both teachers and students shared some suitable learning methods for IPE. The result showed students mention more suitable methods than their teachers.

**Implication:** Both student and teacher stated that IPE can be implemented for Indonesian. Learning method suitable for IPE in Indonesia similar to the various collaborative methods have implemented in some university.

P2-54. Impact of Interprofessional Health Fairs on Students' Willingness to Work Together on Interprofessional Projects: Implication for Future Practice

- **Carisa Champion-Lippmann,** Nova Southeastern University, College of Osteopathic Medicine, Tamarac, FL, USA
- **Eric Chung,** Nova Southeastern University, College of Osteopathic Medicine, Orlando, FL, USA
- **Cecilia Rokusek,** NSU Institute for Disaster and Emergency Preparedness, Davie, FL, USA

**Submitted abstract:**
In this paper, we examine student-initiated approaches to interprofessional emersion and the attitude and awareness changes before and after nine different health profession colleges work together on a student run rural health fair. Thus far, numerous studies have focused on interprofessional education within a curriculum, however we suggest that student attitudes and awareness positively increase when they participate in projects outside of the classroom with other health professions such as student run underserved health fairs. This allows for barriers to interprofessional acceptance to be overcome by actually working together in a health care delivery setting. Using student run projects allows students to improve their attitudes towards working with other health professionals without feeling forced into it and actually gives them hands on experience working with other health profession students. The study focuses on the unique aspect of a health fair providing an avenue for various health care profession students to work as a team. We then examine differences in attitudes towards interprofessionalism and conclude that student initiated projects outside of the classroom that involve multiple health professions are a valid alternative to forcing a rigid interprofessional curriculum on health profession students whose schedules are already stretched.

P2-55. Interdisciplinary Student Team Case Collaboration

- **Rachel Allgor,** A. T. Still University, Mesa, AZ, USA
- **Echo Love,** A. T. Still University, Mesa, AZ, USA
- **Xanat Martinez,** Argosy University, Arizona School of Professional Psychology, Mesa, AZ, USA
• **Trevor Nichols**, Arizona School of Dentistry and Oral Health, Mesa, AZ, USA
• **Esther Son**, A. T. Still University, Mesa, AZ, USA

**Submitted abstract:**
The future in healthcare is a collaborative design across all professions. Creating an educational opportunity to train future professionals in a “collaboration ready” mindset is necessary. These collaborations can promote and further new models of interprofessional practice and team-based care. This presentation explores one student-team’s collaborative work merging multiple healthcare occupations and technology to empower a new vision of what healthcare can look like for our patients and professionals. We emphasized the use of existing technology to not only encourage collaboration but also to facilitate a better, healthier, and safer experience for our patient. The final product was presented at the 2013 A. T. Still University Interprofessional Education Collaborative Case Competition. This competition provided students from multidisciplinary professions to work as a team, meeting competencies in roles and responsibilities, values and ethics, interprofessional communication, and teamwork. This team was comprised of students from two universities (A. T. Still University and The Arizona School of Professional Psychology at Argosy University) and the professions of Doctor of Osteopathic Medicine (D.O.), Doctor of Clinical Psychology (Psy.D), Doctor of Dental Medicine (D.M.D), Doctor of Audiology (Au.D.), and Master’s of Occupational Therapy (M.S.). The team created a collaborative analysis about the care of a patient while teaching, sharing, and learning about each other’s professions and how they work cooperatively toward a patient-centered practice. Presented in this poster presentation is the process the team used to implement their collaboration, examples of what the patient-centered team experience looked like with the patient and his family the center of the team, and included a sample schedule and discharge summary. Technology was a team member as well but with the emphasis that it enhanced collaboration and never replaces in person care.

**Author Biographies**
My name is Xanat Martinez. My undergraduate degree is in business computer systems earned from New Mexico State University. I earned my master of arts in Forensic Psychology in 2008. I am currently pursuing a Doctor of Clinical Psychology degree (Psy.D) with an emphasis in forensics and neuropsychology from the American School of Professional Psychology at Argosy as I close out a 20+ year career as an adult probation officer.

My name is Trevor Nichols. I have been married four years and have two-year-old identical twin boys. I attended Arizona State University and graduated summa cum laude with valedictorian honors from the School of Nutrition and Health Promotion. I am currently a second-year student dentist at the Arizona School of Dentistry and Oral Health. My goals are to someday practice dentistry among the underserved to increase my patient’s, their family’s, and their community’s oral health.

I am Echo Love. I earned my bachelors of science in Family and Human Development from Arizona State University in December of 2012. I also graduated from Barrett, the Honors College. My undergraduate thesis analyzed college students’ abilities to assign infant gender labels and explored infant gender stereotypes. I am currently working on my master’s of Occupational Therapy from A. T. Still University; I plan to graduate in 2016. I hope to work in pediatrics.

**P2-56. An Interprofessional Simulation Field Experience**
• **Martha Sexton**, University of Toledo, Toledo, OH, USA
- **Paul P. Rega**, University of Toledo, Department of Public Health & Prevent Medicine, Toledo, OH, USA
- **Maura Crescenzo**, University of Toledo, Toledo, OH, USA

Submitted abstract:

**Background:** Preparing future generations of nursing faculty is a growing concern among nursing leaders. There is currently a national nurse faculty vacancy rate of 7.6%, which is likely to increase due to the projected numbers of retiring faculty. Interestingly, the number of Advanced Practice Nurses (APN), specifically Nurse Practitioners (NP's) are expected to double by 2025. NP's have the potential to play a significant role in educating future nurses, however most NP curriculums do not include courses dedicated to teaching. In addition, our complex healthcare system today expects students to be prepared to work in interprofessional healthcare teams. A growing concern is how best to prepare for the worsening nurse faculty shortage and how to educate our future nurses to be effective members of interprofessional teams.

**Objective:** The purpose of this project is to describe a unique interprofessional capstone field study experience offered at the University of Toledo.

**Methods:** The objectives of the capstone experience included the following: to review the literature on the role of NP's in teaching pre-licensure nursing students, and to instruct pre-licensure nursing students in weekly interprofessional emergency medicine simulation scenarios. Once weekly for a four hour time period, an interprofessional faculty team, and the NP student instructed medical students, pharmacy students, physician assistant students, and pre-licensure nursing students in the care of simulated emergency room patients.

**Results:** Results included a unique, educational capstone field experience for a future advanced practice nurse. The student gained knowledge on the care of emergency room patients, an understanding of the interprofessional competencies, and experience in teaching pre-licensure students.

**Implications:** Nurse leaders need to develop unique strategies for encouraging the largest population of advanced practice nurses(NP's) to become engaged in educating pre-licensure nurses. In addition, future healthcare professionals must be equipped with strategies to effectively collaborate in interprofessional teams.

**Author Biographies**

Martha Sexton PhD (c), RN, CNS is the Director of the Learning Resource Center and Interprofessional Simulation at the University of Toledo in the College of Nursing. She earned her Bachelors of Science in Nursing at Bowling Green State University and her Master’s in Mental Health Nursing at the Medical College of Ohio. She is currently completing her dissertation study which is investigating determinants of conflict resolution self-efficacy in interprofessional healthcare teams. Her research interests include interprofessional education and teams and teamwork.

Paul Rega MD, FACEP has been a practicing emergency/flight physician for over thirty years. Additionally, he has dedicated a significant portion of his career in disaster deployments, education, and research. He currently serves as an Assistant Professor in the Department of Public Health/Preventative Medicine and the Department of Emergency Medicine at the University of Toledo.

Maura Crescenzo received a diploma from New England Baptist Hospital School of Nursing in Boston in
1988 and a BSN Georgetown University. Past experience includes many years in a variety of ICU settings. Most recent experience includes adjunct faculty at Owens Community College and Teaching Assistant in the Learning Resource Center at the University Of Toledo College Of Nursing. Maura is pursuing a MSN/FNP degree which she hopes to complete in May 2015.

**P2.57. The Evolving Role of a Student Interprofessional Society in Interprofessional Curriculum Development**

- **Navjot Rai**, University of Toronto, Toronto, ON, Canada
- **Erika North**, University of Toronto, Toronto, ON, Canada
- **Amanda D’Aurelio**, University of Toronto, Toronto, ON, Canada

**Submitted abstract:**

**Background:** Fostering relationships between students and faculty for the development and revision of interprofessional curriculum contributes to the evolution of interprofessional education and increased engagement of the student body. The Interprofessional Healthcare Students’ Association (IPHSA) is a student run organization that represents and connects students from thirteen healthcare professions across the University of Toronto, Canadian College of Naturopathic Medicine and Canadian Memorial Chiropractic College. Founded in 2010, IPHSA’s mandate is to enhance the experience of an integrated educational environment with the goal of promoting interprofessional collaboration that will positively impact future health care practice. As a highly engaged student run organization, IPHSA has been instrumental in the continued development of interprofessional curriculum and experiences through education, outreach and social initiatives.

**Objectives:** To demonstrate the evolving role of a student run organization in the provision of student feedback regarding IPE curriculum, contribution to IPE development, independent establishment of student run IPE opportunities and engagement through student leadership.

**Methods:** Using the results of the annual interprofessional survey, analysis of the curriculum changes secondary to student involvement in elective working groups and attending curricular events, and data gathered from student run initiatives, we will present a picture of the evolving role of a student interprofessional society and its participation in interprofessional curriculum development.

**Results & Implications:** Results will reveal student perception of the interprofessional education curriculum and outcomes from involvement in curricular development. Specifically, the impact of student feedback and contributions in the development, enhancement and success of this interprofessional education will be presented. Finally student identified areas for growth will be highlighted with the aim of bringing interprofessional education inline with practice expectations of future healthcare providers to allow for dynamic interprofessional learning.

**Author Biographies**

**NAVJOT RAI** --- Navjot is a second-‐year medical student at the University of Toronto and current co-‐president of the Interprofessional Healthcare Students’ Association (IPHSA) and Vice-‐President of Interprofessional Education for the Medical Society. Navjot is an active member of Interprofessional activities at the University of Toronto who is part of multiple elective development working groups, has facilitated student electives, and helped coordinate the IPHSA orientation over the past two years.

**ERIKA NORTH** --- Erika is a second year physician assistant student at the University of Toronto. Erika is the Senior Interprofessional Representative for the physician assistant student body and she was
Background: Graduate and undergraduate nursing students participated in a day long introductory interprofessional education (IPE) intensive along with students from 9 other health science colleges across two University campuses. Half of the total nurses were advanced practice nursing (APN) students (n=66), already working in healthcare. Students completed pre-course assignments including reading IPE background articles, completing attitudes and knowledge surveys, and viewing discipline specific video presentations on the background, scope of practice, and educational requirements of each discipline. Students worked in teams led by an IPE trained facilitator. Following the initial ice-breaker activity, students worked together through case studies that followed one patient across transitions of care from the Emergency Department to the hospital discharge planning process. The course evaluation included three ratings scales, open-ended questions exploring the impact of the course on future interprofessional practice and the impact of the trained facilitator.

Objectives:
1. Compare the effectiveness of an introductory IPE program between advanced practice nursing students and graduate/undergraduate nursing students at two university campuses.
2. Examine the experiential difference between the nursing students at the two different campuses.

Methods: Content analysis was completed for open-ended responses from the course evaluation by four members of the research team. Discrepancies were resolved through discussion. A comprehensive set of themes emerged from the iterative process.

Results: Across locations, level in school or experience, nursing students valued the program. APNs recognized they had the most exposure to other disciplines prior to this formal IPE program. Undergraduate nurses recognized the import of communication. Graduate nurses recognized the import of utilizing all members of the team. Medicine students reflected a perceived threat to their to physician role by APNs.
**Implications:** Students value learning with as many different disciplines as possible. Consideration must be made to the perception that APNs are threatening the traditional physician role.

**Author Biographies**

Carla M Tozer, MSN, APN/CNP is a board certified nurse practitioner in adult and geriatric primary care and hospice and palliative nursing, currently on staff at UIC College of Nursing working on the federal project, “Money Follows the Person” and is a student enrolled in the Doctorate of Nursing Practice program.

Valerie Gruss, PhD, APN, CNP-BC is a board certified geriatric nurse practitioner and dementia researcher on faculty at UIC College of Nursing and serves as a co-founder of the University’s Collaborative for Excellence in Interprofessional Education.

Mary T. Keehn, PT, DPT, MHPE is a physical therapist who has had professional roles as a clinician, educator and an administrator. She is currently serving as the Associate Dean for Clinical Affairs in the College of Applied Health Sciences at UIC and is enrolled in a PhD program studying Curriculum and Instruction for Interprofessional Education.

**P2-59. Student and Teacher Perceptions of Ideal Time and Topics for IPE Learning Simulation in Indonesia**

- **Candrika Dini Khairani,** University of Gadjah Mada, Tangerang, Banten, Indonesia

**Submitted abstract:**

**Background:** Indonesia is a populous country where the number of people is not balanced with the quality of health system and health is an important matter to be concerned. A qualified health service can be obtained with collaborative practice. But in the implementation, health professional needs an earlier training which can be applied since education phase through interprofessional education (IPE). It needs to involve both students and teachers in developing the desired model of IPE implementation. In this study we assessed the students’ perceptions of the topics and ideal time to implement IPE learning in Indonesia health undergraduate program.

**Objectives:** To obtain the ideal time and topics for IPE learning simulation in Indonesia based on health students and teachers’ perception

**Methods:** The research is a qualitative study with Focused Group Discussion (FGD). Participants were 196 undergraduate students and 46 teachers from University of Gadjah Mada, Yogyakarta and University of Hasanudin, Makassar from in their final year from medicine, dentistry, midwifery, nursing, pharmacy, nutrition and public health. The research is conducted from July until December 2011.

**Results:** The overall results suggest a variation of student and teacher perceptions of topic and the ideal time to implement IPE in Indonesia. The proposed recommendations for topic are mostly about teamwork, for example communication, health ethics, professional behavior and collaborative practice. Other topics concerns global health problem, disaster management and health promotion. And the perception of ideal time to implement IPE ranges from early to final year of undergraduate program and in clinical education. The results suggest a recommendation of topics and the ideal time to develop IPE model based on student and teacher perceptions for university or stake holders. Further research is needed to develop an applicative IPE learning method in a comprehensive simulation and evaluation.

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Author Biographies
Candrika Dini Khairani is currently a clinical student in Faculty of Medicine University of Gadjah Mada, Yogyakarta Indonesia. She codeveloped an electronic scientific journal for health student from 7 professions (www.bimkes.org) and a part of HPEQ Student, a network of Indonesian health professional student organizations which aims for health professional education quality improvement in Indonesia.

P2-60. Child’s Play : A novel approach to community integration for neuro rehabilitation of younger adults with Acquired Brain Injury

- Rekha Vijayshankar, Kings College, London, UK

Submitted abstract:
Based on over seven years of practice experience in facilitating self worth, improvements in communication and brain function for younger adults (18-65) with acquired brain injury through community integration in primary schools. Associating with children in structured activities in the field of art, music and Physical Education, has demonstrated consistently positive patient outcomes.

P2-61. Pharmacy and Medical Student Perceptions of an Interprofessional Primary Care Clinic Experience in an Underserved Community Setting

- Michael Dail, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- Sallie Mayer, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- Allison Vanderbilt, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
- Steve Crossman, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA

Submitted abstract:
**Background**: Interprofessional Education (IPE), defined as, when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes, can lead to an improvement for public health and address social determinants of health utilizing a multidimensional approach to healthcare. Existing descriptive reports detail IPE experiences in didactic settings, however, limited data is available that describe IPE experiences in a clinical setting prior to advanced training. An interprofessional primary care clinic experience was developed to partner medical, pharmacy, and language interpreter students together to care for patients in an uninsured community safety-net setting. Students were oriented to IPE and teamwork principles by an IPE preceptor team, which also precept the students during weekly clinic sessions.

**Methods**: Mixed-methods data were collected for two years (n=68) from student course evaluations and surveys.

**Results**: Quantitative data utilizing 4-point Likert scales demonstrated that the course stimulated student thinking (mean=3.85) and motivated them to learn (mean=3.84). Inductive thematic analysis revealed students strongly valued resulting interprofessional teamwork and found the experience to connect didactic learning with clinical experience. Students emphasized the integration of knowledge and experience of other professions to inform care decisions and interprofessional roles and responsibilities as aligned with the Core Competencies for Interprofessional Collaborative Practice.

**Implications**: Pharmacy and medical students find it beneficial to learn in an interprofessional environment and perceive the experience to promote critical thinking, an important theme in
healthcare professional education. This poster describes the interprofessional clinical experience and reflects on the inclusion of other healthcare professional students while considering how the model may be replicated in other health education environments.

**Author Biographies**
Michael D. Dail, PharmD C- urrently, the VCU School of Pharmacy – CrossOver Healthcare Ministry Ambulatory Care Pharmacy Practice resident and Clinical Instructor of Pharmacotherapy and Outcomes Science. His areas of practice include: CrossOver Healthcare Ministry, Goochland Free Clinic and Family Services, and the Ambulatory Care Center on the VCU Medical Campus. Dr. Dail places a strong focus on interprofessional education and practice with the hope to continue his current level of collaboration in future positions.

Sallie D. Mayer, PharmD, MBA, BCPS, CDE - Assistant Professor of Pharmacotherapy and Outcomes Science and has been on faculty at VCU for 8 years. Her areas of expertise include community engagement, service-learning, interprofessional practice, and diabetes and chronic disease management in the safety-net. Achievements include developing and initiating new collaborative clinical pharmacy-integrated services in two Richmond free clinics over the last three years, as well as developing a new Ambulatory Care Pharmacy Residency Program co-funded by CrossOver Healthcare Ministry.

Allison A. Vanderbilt, EdD, MS - The Director of Assessment and Evaluation for the Center on Health Disparities and is an Assistant Professor of assessment and evaluation at VCU, School of Medicine. She is the evaluator for the new integrated curriculum at VCU, School of Medicine and for the P60 National Institute for Minority Health and Health Disparities’ (NIMHD) Center grant. Additionally, she mentors undergraduate students, UME students, residents and faculty related to medical education research, assessment and evaluation.

**P2-63. Enhancing Physicians’ Learning of CPOE Through Mobile Technology**

- **Elizabeth LaRue**, University of Pittsburgh, Pittsburgh, PA, USA
- **Deborah Eiler**, Allscripts, Pittsburgh, PA, USA

**Submitted abstract:**
Computerized Physician Order Entry (CPOE) can reduce medication errors and duplicate testing, improve the efficiency of patient care delivery and promote evidence-based treatments. However, barriers to adoption make CPOE usage by physicians difficult to achieve. One of the most common barriers is effective training. Physicians prefer hands-on practice to learn CPOE with a trainer at their side while they are seeing patients. Limited training resources make this level of support a challenge but with the proliferation of personally owned mobile devices, a mobile training tool customized for a physicians’ work environment could improve their adoption of CPOE.

The CPOE Mobile Support is a mobile training application designed for physicians learning to use CPOE. The application was created using open source software. This software allows novice developers to inexpensively create mobile applications that are customized for their work. A field study was conducted to evaluate the usability of the application. Five physicians volunteered to participate in the testing. The test sessions consisted of five tasks performed on the same mobile device. Metrics were recorded to evaluate the attributes of learnability, efficiency, error, satisfaction, and effectiveness. The tasks were timed and the number of committed errors was recorded. A Likert scale was used to measure participant satisfaction in a post-test interview.
The results of the field study found that task completion times and error rates were close to the benchmark with exception of one task. The majority of the participants were extremely satisfied with the design and functionality of the application and would find it useful in their work environment. In conclusion, the overall successful usability study and positive attitude toward the design and functionality of the application indicate that it could be a useful solution to enhance physicians’ learning of CPOE when a trainer is not available.

P2-64. Life is Sweet Move Your Feet

- Ryan Hill, University of New England, Portland, ME, USA
- Alisa Fay, University of New England, Portland, ME, USA
- Ashley Picoraro, University of New England, Portland, ME, USA
- Kristi Stalsbroten, University of New England, Portland, ME, USA

Submitted abstract:

Introduction: Type 2 Diabetes Mellitus (DM2) is a worldwide epidemic affecting more than 347 million people. Maine is amongst the highest-ranking states within the United States for incidence of DM2 per capita. There are few implemented programs in Maine aimed at decreasing risk factors for secondary complications of DM2. This project combined physical therapy and nursing scopes of knowledge to develop an integrated exercise and nutrition program for individuals at risk for or diagnosed with DM2.

Purpose: The purpose of Life is Sweet, Move Your Feet is to implement an inter-professionally driven ten-week exercise and education program at the Medically Oriented Gym for individuals who are at risk for or are diagnosed with DM2.

Methods: Physical therapy and nursing students from the University of New England received an interprofessional mini-grant to develop an integrated nutrition and exercise program for adults utilizing a medically oriented mini-gym. Physical therapy students implemented and monitored the cardiovascular and resistance training exercise aspect of the program while simultaneously students from the nursing program designed a Diabetes-specific education program. Six participants diagnosed with or at risk for DM2 took part in the pilot program.

Results: Body weight, blood pressure, Body Mass Index, percent body fat, waist circumference, hip circumference, and waist to hip ratio mean averages all decreased. However, there was no statistically significant difference in these measures.

Discussion: Health promotion programs that include cardiovascular and resistance training and nutrition education show promise to decrease risk factors associated with DM2 and improve patients’ quality of life. In the future it is hoped this project will extend beyond the confines of local medical alliances into the general public as need for and awareness of services grows.

P2-65. Knowledge Translation: Teaching Pain Management by Integrating a Pain Consult Team with the Primary Care Team

- Kira Feldman, Baycrest, Toronto, ON, Canada
- Daphna Grossman, Baycrest, Toronto, ON, Canada

Submitted abstract:
Assessing and treating pain in geriatric patients presents many difficulties due to cognitive impairment and multifaceted diagnoses. Accordingly, pain in the elderly must be addressed by multidisciplinary teams, working with confidence and cohesion. A needs assessment survey showed that over half of the patients on Baycrest’s Acute Care Unit experience severe pain that was not necessarily being treated effectively. In response, this study was designed to improve the quality of pain management in the unit by educating and empowering the staff to treat pain independently, rather than relying on external consultations. Social network can play an important role in the success of knowledge translation, as it can affect communication patterns and influence decision making across a team. Applying this to Baycrest, three pain specialists integrated themselves into the social network of the Acute Care Unit team to disseminate their expertise on the unit. Over the course of six months, they accompanied the regular staff on rounds, met personally with patients and doctors to refine treatment plans, and provided education concerning opioids and adjuvant pain medication. Post- test interviews showed that staff felt an overall increase in personal confidence, gaining the knowledge necessary to more effectively manage their patients’ pain. Incorporating themselves into the unit, the pain specialists were able to provide education and confidence through modeling, and were no longer viewed as external consulting authorities. By creating a social network supporting successful knowledge translation, it was possible to begin establishing the Acute Care Unit as an independent center of pain management. Following this success, integrated partnerships and education through modeling should be pursued as a method of ensuring knowledge translation in other units across Baycrest and the medical community.

P2-66. Improving Stepped Care Model to address psychological support for Stroke Survivors' Care

- Jackline Sarah Macharia, University of Essex, Essex, UK

Submitted abstract:

**Background:** Stroke is the remains the 3rd largest cause of death and disability in the UK. Post-Stroke depression is likely to occur to 30% of the stroke survivors. To promote quality care outcomes for stroke survivors it is important to utilise the recommended Stepped Care Model. However, lack of stringent evaluations, staff and resources often mean that psychological support for stroke survivors is often under-looked.

**Objective:** The purpose of the information presented in the poster is to explore issues pertaining to a team approach in promoting psychological support post-stroke.

**Methods:** A literature review has been carried to explore disparities in accessing psychological care post-stroke. CINAHL, MEDLINE and Psy-ARTICLES databases have been used to identify stroke survivors’ perspective to psychological support. A systematic review was used to analyse the findings.

**Results:** Systematic review identified 3 themes of:

1. Coping with change: Stress and lack motivation can impact on rehabilitation.
2. Information and education: Low level of community-based stroke support interventions and disjointed discharge.
3. Communication deficits prevent individuals from expressing psychological need.

**Implications:** Stroke survivors experience a variety of psychological trajectories in the recovery process. The review carried out identified that more research is needed to underpin the health care professional, carers and stroke survivors’ perception of stroke psychological support. The findings were that internal
resources e.g. motivation and external resources e.g. community care based exercises, peer support and reviews are important in the coping process. The UK quality care guidelines for stroke provided by the National Stroke Strategy (2007) and Royal College of Physicians (2012) advocates for the use of stepped care model to implement psychological support. However, the implementation of such interventions remains disjointed due to lack of education, quality measures and resources. Models of community based care interventions are appropriate for long-term screening and follow up.

**Author Biographies**
Jackline Sarah Macharia, 2nd Year Pre-registration Nursing Student at the University of Essex. Also a Student member of the Centre for Advancement of Inter-professional Education (CAIPE).

**P2-67. Attitudes of Filipino Occupational Therapists Towards Interprofessional Education and Collaboration**

- **Michael Sy**, University of the Philippines, Manila, Philippines

**Submitted abstract:**
**Background:** Interprofessional education (IPE) and interprofessional collaboration (IPC) are global strategies that value the principles of teamwork in order to unite both health and educational systems resulting to improved health outcomes in local communities. Occupational therapists are team members within rehabilitation teams who contribute to improving health outcomes of people through the use of meaningful activities called occupations.

**Objectives:** The goals of this study are to examine the relationships between attitudes towards IPE and IPC and 1) prior experience with IPE and IPC, 2) number of years in practice in occupational therapy (OT), and 3) practice context (urban or rural) among occupational therapists.

**Methods:** The study will utilize a cross-sectional survey design among Filipino occupational therapists who are duly registered in the professional association and are currently working in the Philippines (n=171). Each respondent will be surveyed using three (3) pre-validated instruments: RIPLS (19 items), IEPS (18 items), and Modified ATHCTS (14 items) via internet-based or questionnaire methods. Data obtained will be analyzed using tally of frequencies for categorical data while using non-parametric tests for ordinal data with α=0.05 to support or discard the null hypothesis (H0) and reviewing the cross-tabulation to identify where differences (or non-difference) lie.

**Results and Implications:** The results of this study (to be concluded by May 2014) can be used as baseline empirical information on IPE and IPC in terms of curriculum design within health professions education in the Philippines, accreditation of educational institutions offering OT programs in the Philippines by national and international agencies, and further research in the field of IPE and IPC in the context of a developing nation.

**P2-68. Impact of an Interprofessional Service-Learning Elective Course on Health Professions Students’ Achievement of IPEC Competencies**

- **Alexa Sevin**, The Ohio State University, College of Pharmacy, Columbus, OH, USA
- **Kenneth Hale**, The Ohio State University, College of Pharmacy, Columbus, OH, USA
- **Nicole V. Brown**, The Ohio State University, Center for Biostatistics, Columbus, OH, USA
- **James W. McAuley**, The Ohio State University, College of Pharmacy, Columbus, OH, USA
Submitted abstract:

**Background:** To create a collaborative practice-ready workforce, health professions students must develop the knowledge, skills, and behaviors to function effectively in team-based models of care. Service-learning is one pedagogical method for achieving this goal.

**Objectives:** To investigate the effectiveness of an interprofessional (IP) service-learning (S-L) elective course for improving health professions students’ confidence in Interprofessional Education Collaborative (IPEC) competencies.

**Methods:** This study evaluates pharmacy, nursing, and social work students at the completion of an IP S-L course involving patient care in underserved populations. The course consists of two components: (1) a service component where students provide patient care in an IP student-run free clinic and (2) workshops in which students reflect on their experiences and discuss roles, team dynamics, communication skills, and challenges with underserved patient populations in IP groups. All students enrolled in the course (approximately 25) will be invited to complete a previously validated, 42 question survey in a retrospective post-then-pre design (i.e., at the conclusion of the course, students will assess themselves on each competency and reflect back to assess their proficiency in each competency prior to participating in the course). The survey instrument assesses IPEC competencies in four domains: values and ethics, roles and responsibilities, IP communication, and teams and teamwork. Participant demographics and previous IP experience will be collected. Descriptive statistics will be generated for each survey item with responses expressed using frequencies and percentages, and a paired t-test will be utilized to compare differences in post- and retrospective pre-test scores.

**Results:** Results are expected to provide evidence of the impact of an IP S-L course on students’ confidence in their abilities to practice as a part of an IP team.

**Implications:** As IP competencies are incorporated into educational accreditation standards, health professions schools will need to identify effective ways to achieve those competencies. This study will offer evidence of the effectiveness of a S-L course on student development of IP competencies.

**Author Biographies**
Alexa M. Sevin, PharmD is a PGY2 Ambulatory Care Pharmacy Practice Resident in Community Engagement through Team-Based Care at The Ohio State University College of Pharmacy. Dr. Sevin completed her PGY1 Pharmacy Practice Residency in Ambulatory Care at The Ohio State College of Pharmacy. Her passions include interprofessional education and underserved patient care.

Kenneth M. Hale, R.Ph., Ph.D. is the Assistant Dean for Professional and External Affairs and a Clinical Professor of Pharmacy Practice and Administration at The Ohio State University College of Pharmacy.

James W. McAuley, Ph.D., FAPhA is a Professor of Pharmacy Practice, Neurology & Pharmacology and the Vice-Chair of the Division of Pharmacy Practice and Administration at The Ohio State University Colleges of Pharmacy & Medicine.

**P2-69. IRISE: Interprofessional Research, Innovate, Service, Educate**
- Kathryn Robinson, Northeastern University, Boston, MA, USA
- Lauren Jarmusz, Northeastern University, Boston, MA, USA
- Sana Mandal, Northeastern University, Boston, MA, USA
Submitted abstract:

Background: Oral health is a neglected global and local health challenge for the 21st century. Bouvé College of Health Sciences at Northeastern University is at the vanguard of improving oral health for a global society by inspiring and creating the next generation of interprofessional healthcare leaders with the competencies to shape the future of oral health care. iRISE: Interprofessional Research, Innovate, Service, Educate is a student-led initiative designed to promote an interprofessional collaborative environment where students across health professions cultivate leadership and innovation skills to improve oral-systemic patient-centered care. iRISE provides a platform for interprofessional research, education, and practice within the College, across the University, and between other academic institutions and health systems.

Objectives: The purpose of this poster presentation is to describe the iRISE model as an effective approach to advance interprofessional health education through student engagement in oral health. Participants will be able to a) apply iRISE innovations in other academic and health care settings, and b) integrate student engagement strategies in advancing oral-systemic health locally and globally.

Methods: A storyboard is used to present the development and implementation of the iRISE model. Its developmental journey includes the formation of an interprofessional student committee, mission statement, and strategic plan. Successes, challenges, and lessons learned are discussed. Student-led innovations in interprofessional education include online learning, community service, research collaborations, and simulations with standardized patients.

Results: The iRISE model established a student leadership infrastructure to support innovations in interprofessional education, research and practice to improve oral-systemic health. Outcomes included expansion of student engagement and interprofessional activities across Schools of Pharmacy, Nursing and Health Sciences at Bouvé College; and inter-institutional collaborations in advancing oral-systemic health.

Implications: iRISE is a replicable and sustainable model for cultivating leadership and advancing interprofessional health education to improve oral health locally and globally.

P2-70. Developing a team-based integrated care model to improve physical and behavioral health outcomes of patients with serious mental illness (SMI)

- Rachel Jansen, Western Psychiatric Institute & Clinic, Pittsburgh, PA, USA
- Jamie Montgomery, Western Psychiatric Institute & Clinic, Pittsburgh, PA, USA
- Ana Lupu, Western Psychiatric Institute & Clinic, Pittsburgh, PA, USA
- Tanya Fabian, Western Psychiatric Institute & Clinic, Pittsburgh, PA, USA

Submitted abstract:

Background: Individuals with serious mental illness (SMI) are more likely to die prematurely from the same medical causes as the general population. Limited access to primary care services and side effects of psychiatric medications can be contributing factors. Atypical antipsychotics have been associated with increased risk of metabolic syndrome with clozapine having the highest risk. Routine metabolic monitoring is recommended (e.g. weight, waist circumference, blood pressure, fasting lipids and glucose) but may be a challenge in this population due to lack of integration of physical and behavioral healthcare.
**Objectives:** To develop a team-based integrated care model to address both the physical and behavioral health care needs of patients with SMI. Specifically, we aim to assess the impact of a pharmacist on metabolic monitoring rates in patients managed through our clozapine clinic.

**Methods:** The electronic medical records of approximately 170 SMI patients will be reviewed to assess the impact of a pharmacist on rates of metabolic monitoring within the clozapine clinic. A pharmacist will facilitate metabolic monitoring, provide standardized documentation and serve as a link between physical and behavioral healthcare providers.

**Results:** Within the new team-based care model, adherence to the metabolic monitoring guideline will be improved. A standardized process will be created to screen and document modifiable health risk factors and related interventions. Integrating a pharmacist into the process will help facilitate metabolic monitoring and ensure coordination and continuity of care among patients seen in the clozapine clinic. Patient and health system outcomes will be evaluated.

**Implications** of your proposed presentation: Approximately 11.4 million adults with SMI in the United States are disproportionately affected by modifiable health risk factors and have an increased chance of premature mortality. Patient outcomes can be improved through integration of physical and behavioral healthcare services and better collaboration and communication among healthcare providers.

**P2-71. The Importance of Interprofessional Education from a First Year Health Student Perspective**

- Marianne McCoy, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- Rose L. Hoffmann, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA

**Background:** Interprofessional education is a priority with undergraduate and graduate health science students. Previous studies have shown that health professional students learn the importance of teamwork and working together through planned activities in the curriculum. Benefits include positive patient outcomes, increased patient satisfaction and reduction of clinical errors. In a previous study, students who were involved in interprofessional activities with other students expressed positive comments about their professional relationship with other healthcare students. There is currently limited data available regarding first year health professional students’ perceptions about the importance of interprofessional teamwork.

**Aim:** The aim of the study is to obtain the perception of the importance of interprofessional teamwork from students who are in their first professional year in one of the six schools of the Health Sciences at the University of Pittsburgh.

**Method/Program/Practice:** All first year health professional students who attended the 2013 Interprofessional Forum: Educating Health Care Teams of the Future were asked to participate. The forum included a standardized patient and team interaction, speakers from a community healthcare setting practicing interprofessional collaboration and representatives from the IHI Open School for Health Professions. A 7 question likert scale pretest posttest investigator developed survey seeking student feedback on the importance of interprofessional teamwork was administered via Google Forms.
Outcome Data: Over 400 students completed the surveys. Student perceptions of the importance of interprofessional teamwork showed statistically significant improvement from pre to post test on all seven questions.

Conclusion: A forum that introduces first year health professional students to the importance of interprofessional teams can improve perceptions and lead to planned curricula activities in future years.

Author Biographies
Marianne McCoy is a junior undergraduate nursing student at the University of Pittsburgh School of Nursing. She participates in the Undergraduate Student Research Program. Her interests include interprofessional education, pediatric and cardiac nursing. She would like to pursue a graduate degree in nursing and education in the future.

Rosemary L Hoffmann, PhD, RN, CNL is an associate professor at the University of Pittsburgh School of nursing, teaches at the undergraduate and graduate levels and coordinates the Clinical Nurse Leader MSN area of concentration. Dr. Hoffmann is the School of Nursing faculty representative for the Working Group on Interprofessional Education, comprised of faculty from the six schools of the health sciences at the University. She has lectured nationally and internationally on interprofessional education.

P2-72. Developing an Interprofessional Model to Increase Confidence in Breastfeeding Education for Future Healthcare Providers

- Adam Yan, University of Manitoba, Winnipeg, MB, Canada
- Jordan Crosina, University of Manitoba, Winnipeg, MB, Canada
- Heather Dean, University of Manitoba, Winnipeg, MB, Canada
- Nathan Nickel, University of Manitoba, Winnipeg, MB, Canada
- Kathy Hamelin, University of Manitoba, Winnipeg, MB, Canada

Submitted abstract:
One of the 10 Steps to Successful Breastfeeding in the UNICEF/WHO Baby Friendly Hospital Initiative is to ensure that all healthcare staff providing care to new mothers and infants have the training necessary to support breastfeeding. To substantiate this aim, we are investigating two methods of delivering breastfeeding education to students in medicine, nursing, pharmacy, and physician assistant programs. One method will be an online training module that students can complete independently; the other will be a collaborative, interactive session incorporating students and instructors from all four programs. We hypothesize that both educational formats will support the acquisition of breastfeeding knowledge, but that the interactive session will have a greater impact the students’ attitudes towards breastfeeding, and will foster interprofessional collegiality in education and practice. A crossover design will be used in which one group of students will first complete the online course and the other group will participate in the interactive session, then each group will receive the other educational format. We have developed a survey tool to measure knowledge, attitudes, and interprofessionalism, which we will administer as a pretest, between interventions, and as a posttest. If our hypotheses hold true, this study will provide empirical support for the use of interactive, interprofessional approaches in the delivery of breastfeeding training to students in health care programs.
Author Biographies
Adam Yan is currently the Senior Chair of the University of Manitoba’s Institute for Health Improvement (IHI) Chapter. Adam completed a Bachelors of Science Degree with a major in Medical Science from the University of Western Ontario in 2012. Adam is currently on pace to complete his Doctor of Medicine degree, as well as a Bachelors of Science in Medicine degree from the University of Manitoba in 2016.

Jordan Crosina is currently the Junior Chair of the University of Manitoba’s Institute for Health Improvement (IHI) Chapter. Jordan completed a Bachelor of Health Science degree with a major in Biomedical Studies from the University of Northern British Columbia in 2013. Currently at the University of Manitoba, Jordan is on pace to complete a Doctor of Medicine degree and a Bachelor of Science in Medicine degree in 2017.

Dr. Dean graduated from Medicine at Queen’s University in Kingston, Ontario and pursued pediatrics and pediatric endocrinology training in Montreal, Ottawa and Winnipeg. She has been a full time academic clinician in Winnipeg since 1982. Currently she is Professor of Pediatrics, director of Northern and Rural Pediatric Medical Education and Lead in medicine for the Interprofessional Education Initiative, University of Manitoba.

P2-73. The Evolution of Health Care Students’ Clinical Skills in Simulated Settings

- Clinton Morgan, Vanderbilt University, School of Medicine, Nashville, TN, USA
- Gretchen Edwards, Vanderbilt University, School of Medicine, Nashville, TN, USA
- Heather Davidson, Vanderbilt University, School of Medicine, Nashville, TN, USA

Submitted abstract:
In order to more effectively prepare students for the new interprofessional paradigm in health care, Vanderbilt School of Medicine created the Vanderbilt Program for Interprofessional Learning (VPIL), which brings together students in the professional schools of medicine, nursing, pharmacy, and social work to work in teams within various clinics. Qualitative and quantitative assessment of teamwork among health professions students, however, is limited in scope and only beginning to be studied. A set of clinical communication skills exhibited in interprofessional teams from the VPIL program was compared to teams composed solely of medical students through their interactions with standardized patients. The primary objective was to determine, if given the same information, do interprofessional teams of students communicate and gather information similarly in a patient encounter as compared to a team composed solely of medical students? Using the validated SEGUE tool, standardized patients (SPs), blind to cohort, rated VPIL students as superior to the medical-student only groups in demonstration of clinical communication skills (average score 21 vs. 16, respectively, p<0.05). SPs reported that VPIL students were superior in areas directly related to VPIL program goals, including questions related to coaching patients, asking for patient feedback, teaching in the clinic, and the acknowledgement of progress.

P2-74. Supporting the Whole Person: Cancer Care Professionals’ Experiences with Interprofessional Collaboration

- Joanne Magtoto, University of British Columbia, School of Social Work, Vancouver, BC, Canada
- Grant Charles, University of British Columbia, School of Social Work, Vancouver, BC, Canada
- Chris Lovato, University of British Columbia, School of Population and Public Health, Vancouver, BC, Canada
Submitted abstract:

**Background:** Facing cancer requires personal strength drawn from the mind, body, and soul. Canada’s health care system recognizes the need for comprehensive cancer care, and has moved towards offering supportive cancer care for the psychological, social, and spiritual needs of a person faced with cancer. Furthermore, integrating supportive care into primary medical care requires an interprofessional collaborative approach, and these collaborations may facilitate or detract from this integration. This study explores cancer care professionals’ experience offering supportive care as part of an interprofessional team, specifically within a British Columbia cancer care context. Data collection and analysis is underway for this study, and the results will be presented at the conference.

**Research Objective:** My research study objective is to provide understanding on how the Canadian health care system can utilize interprofessional collaborations towards comprehensive and consistent supportive care for families faced with cancer.

**Research Questions:** What are cancer care professionals’ experiences within an interprofessional team? What constituents of their experience facilitate or detract from providing supportive services?

**Methods:** Through a qualitative research approach, I investigated the experiences of cancer care professionals using phenomenological methodology. Participants are cancer care professionals such as social workers, counsellors, and nurses; and these professionals provide supportive services such as psychological, emotional, spiritual, or practical support or resources. A semi-structured interview approach was utilized, and I asked each participant between 5 to 10 questions that explore their experiences with interprofessional collaborations.

**Implications:** Exploring interprofessional collaborations’ influence in offering supportive services is understudied in interprofessional care research, and this study may fill this knowledge gap. Future research may extend on this study by developing theoretical frameworks for interprofessional collaborations within a psychosocial oncology context, and also translating theory into practice towards holistic cancer care addressing the needs of mind, body, and soul.

**P2-75. Outcome of the IPE training in Gunma University – from the students’ perspective –**

- Ayaka Saiki, Gunma University, School of Health Sciences, Maebashi, Gunma, Japan
- Miki Takahashi, Gunma University, School of Health Sciences, Maebashi, Gunma, Japan
- Mika Takabayasi, Gunma University, School of Health Sciences, Maebashi, Gunma, Japan

Submitted abstract:

**Background:** The school of health sciences of Gunma University was established in 1996. It consists of the departments of Nursing, Laboratory Sciences, Physical Therapy, and Occupational Therapy. To enhance collaboration between health professionals, the school has developed the curricula, based on the interprofessional work (IPW). The major advantage of the curricula lies in its training program, “a simulated interprofessional training”, where students work in group and undergo a series of activities, including group discussions, clinical training, general meetings, and reporting.

**Objective:** The objectives of the training program are (1) To experience being part of a health care team, and (2) To learn about IPW in clinical practice. This paper aims to describe the outcome of the training program from the students’ perspective.
**Method:** The third-year students participated in teamwork training from April to August in 2013. We separated into small groups; each consists of the students from different departments. Each group prepared the training agenda and then went through the clinical training to learn IPW at each facility for two days. We discussed our achievements obtained from clinical training. Then each group made a presentation about its achievement.

**Results:** We have learned that health professionals with their perspectives support the patients differently according to their respective fields depending on the different stages of the illness. It is vital to share information amongst the different professionals and to consider the patient to be a member of the team.

**Implications:** We believe that the most ideal and the most effective care for the patient is that each of us continue studying in our specialized field. The patient will benefit from the health care provided by specialized professionals if an interest and understanding of it in different fields are maintained. The coordination with different professionals will bring the patient a more effective.

**P2-76. Seattle Project CHANCE: a multidisciplinary, student-led, diabetes-focused, interactive patient education program for a low-income and homeless urban population**

- **Steve Erickson,** University of Washington, School of Pharmacy, Seattle, WA, USA
- **Paige Mathew,** University of Washington, School of Pharmacy, Seattle, WA, USA

**Submitted abstract:**
**Background:** Diabetes mellitus has a higher prevalence and severity among the low-/no-income homeless population. Effective patient education must account for this population’s limited resources and access to care. A prior needs assessment completed as part of this project showed low literacy (30%) and a need for education on glucose management and nutrition.

**Objectives:** Design and implement a sustainable, multidisciplinary, student-led patient education program with the goal of engaging patients and empowering them to make better-informed decisions that will improve control of their diabetes and overall health.

**Methods:** A multidisciplinary student-led healthcare team developed interactive and adaptable hour-long patient education sessions and brochures on the following topics: Highs and Lows of Blood Sugar, Proper Nutrition and Diabetes, and Understanding Your Meds. The team then implemented voluntary twice-weekly education sessions on these topics for groups of homeless and low-income patients at a medical respite center. Patients were encouraged to provide feedback and complete a survey at the end of each session.

**Results:** Thirty-six different patients attended the student-led health education sessions over a period of two months, and of these patients, 11 attended more than one event. Twenty-eight patients indicated the material was very clear, 3 somewhat clear, and zero reported it was confusing. Twenty-eight patients described the sessions as helpful, 3 somewhat helpful, and none indicated the sessions were not helpful. Twenty-seven patients stated they would attend another session in the future, 4 said maybe, and none indicated they would not return.
**Implications:** This project has established a new interprofessional student-led collaborative effort to engage, educate, and empower patients at high risk of poorly-managed health, and as the project continues, there will be a perpetual rolling process of including and transitioning to new students, and additional sessions and materials will be developed about community resources, smoking cessation, and other topics.

**P2-77. Journal of Indonesian Health Students (BIMKES)**

- **Mawar Putri Julica**, Bangka Belitung Provincial Hospital, Pangkal Pinang, Bangka Belitung, Indonesia
- **Candrika Dini Khairani**, University of Gadjah Mada, Tangerang, Banten, Indonesia
- **Indah Fadlul Maula**, BIMKES, Bumiayu, Jawa Tengah, Indonesia

**Submitted abstract:**
Interprofessional education and collaborative practice have recently been emerging issues in Indonesia. A strategic way to increase students’ interest in collaborative practice is to create a media that benefits them in their future professional life. Students from seven different health professions (medicine, dentistry, nutrition, midwifery, nursing, pharmacy, and public health) in Indonesia initiated a free electronic scientific journal to support the government’s plan to require every student to publish a scientific article. Journal of Indonesian Health Students (BIMKES) was created not only to facilitate students to publish their works, but also to prepare students to be able to get involved and contribute positively in the active collaborative practice when they work as health professionals in the future. Electronic journal was chosen as a medium to distribute the journal effectively to health students in Indonesia. This year, BIMKES will be running in its second year with more than 100 scientific publications from health students from all over Indonesia. The website was accessed by more than 5000 readers per month. It is organized in sub groups based on the professions and organized entirely by Indonesian students from different health professions. Every article published in the journal was peer reviewed. Peer review was done by clinicians and teachers from institutions nationwide. Articles which being submitted in BIMKES, were articles and research from seven different health professions. Health students from different professions collaborate together in choosing article that can be published in the journal, especially article from multidiscipline research.

**P2-78. IMPACT: Diabetes: Partnership to Implement Team-Based Diabetes Care in the Safety-Net Setting**

- **Linda Barstow**, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- **Kimberly Means**, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- **Shelby Evans**, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- **Lindsay Martin**, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA

**Submitted abstract:**
**Background:** The goal of the IMPACT: Diabetes Program is to improve outcomes in patients with diabetes by implementing pharmacist-integrated care for underserved patients. Pharmacists worked with 3 free clinics participating in a Medical Home Initiative to implement the team-based care model. Objective: To describe the IMPACT: Diabetes team-based care model, patients followed, and clinical outcomes during a one-year period.

**Methods:** The pharmacist worked with each clinic to establish a collaborative practice, and weekly diabetes clinics. Pharmacists worked with the primary care team, nurses, social workers, clinic staff,
interpreters, lay health promoters, and specialists to coordinate diabetes care. Clinical outcomes were tracked during the year and mean and standard deviations calculated from baseline to most recent encounter.

**Results:** Ninety patients were enrolled in the program from 1/31/12 to 1/31/13. Included patients had at least two visits three months apart, were over 18 years of age, and had A1C values > 7%.

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**Implications:** We successfully implemented the pharmacist-integrated, team-based diabetes care program, which has been sustained. Diabetes care in the safety net can be improved by a team-based approach.

**Author Biographies**

Linda Barstow, PharmD 2015 Currently, VCU School of Pharmacy 4th Year Pharm D Candidate – Her practice interest includes ambulatory care, with a focus in chronic disease management in geriatric patients. In addition to her research at Crossover Ministry Health Clinic, Ms. Barstow also participates in an interprofessional service-learning project at Dominion Place government sponsored housing for older adults. Linda places a strong focus on interprofessional education practice with hopes to continue collaboration with other health professionals in her future career endeavors.

Lindsay Martin, PharmD 2015 A third-year Doctor of Pharmacy student at the VCU School of Pharmacy and has worked as a hospital pharmacy intern for 3 years. She is an active member of the Rho Chi Pharmaceutical Honor Society and the Student Chapter of the Virginia Society of Health-Systems Pharmacists. Her areas of interest include pharmaceutical research and chronic disease state management. Upon graduation, Lindsay hopes to continue her professional education by completing a clinical residency.

Sallie D. Mayer, PharmD, MBA, BCPS, CDE Assistant Professor of Pharmacotherapy and Outcomes Science and has been on faculty at VCU for 8 years. Her areas of expertise include community engagement, service-learning, interprofessional practice, and diabetes and chronic disease management in the safety-net. Achievements include developing and initiating new collaborative clinical pharmacy-integrated services in two Richmond free clinics over the last three years, as well as developing a new Ambulatory Care Pharmacy Residency Program co-funded by CrossOver Healthcare Ministry.

**P2-79. IMPACT: Diabetes: Description of Diabetes Team Interventions and Outcomes Among Various Ethnic Groups**

- **Shelby Evans**, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
- **Lindsay Martin**, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
Linda Barstow, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA
Kimberly Means, Virginia Commonwealth University, School of Pharmacy, Richmond, VA, USA

Submitted abstract:
Background: The IMPACT: Diabetes Program supported the development of a team-based diabetes care model targeting uninsured patients from diverse ethnic backgrounds, and varying English-proficiency. Pharmacists were integrated into the diabetes care team and led visits with these diverse patients. Given health disparities that exist in diabetes outcomes, we seek to better describe the diabetes care provided in our team model, and determine if differences exist among represented ethnic groups.

Objective
1. To describe the care provided by our team diabetes care model, including patient visits and interventions made
2. To compare the patient care and outcomes among the varied ethnic and English-proficiency represented

Methods: Patient visit information, interventions made, as well as diabetes clinical outcomes (such as A1C, LDL, and Blood Pressure) were documented during a one year period from 1/31/12 – 1/31/13.

Results
Objective 1: Patients had an average of 5 visits during the year, the initial visit being on average 48 minutes and follow-up visits 38 minutes. A referral or intervention of some type was made at 87% of visits, medication review and reconciliation completed at 93% of visits, and a follow-up plan made at 100% of visits. Spanish interpreters were utilized in 100% of visits for patients with low English proficiency. Types of interventions made at visits included education, medication changes, assistance with access issues, foot exams, vaccines, referrals (social work, dental, eye, primary care physician), medication review, provision of diabetes testing supplies, and coordination of care.
Objective 2: Data analysis is pending, expected to be complete by 3/1/14.

Implications: The diabetes team care model in the safety-net can serve patients of varying ethnic backgrounds and English proficiency, with interpreters a key member of the health care team. We await results to determine if our team model provided similar care and outcomes among ethnic groups.

Author Biographies
Shelby Evans, PharmD Candidate, 2015 Currently, a 3rd year pharmacy student at Virginia Commonwealth University School of Pharmacy, her area of interests include clinical pharmacy and Interprofessional practice. Shelby serves President of the class of 2015, has traveled on an international medical mission trip through HOMBRE, and plans to pursue post-graduate pharmacy residency training in clinical pharmacy. She took part in a unique Interprofessional clinic elective which paired her with a medical student in providing care to uninsured patients.

Kimberly Means, RN, BSN, PharmD. Candidate, 2015 Currently, a 3rd year pharmacy student at Virginia Commonwealth University School of Pharmacy and a Student Pharmacy Intern at Virginia Commonwealth University Health System. She has worked as a critical care nurse for six years and has also worked as a clinical care leader on an oncology unit. Her special interests include: interprofessional learning and collaboration, medication safety, patient education, and critical care.
Sallie D. Mayer, PharmD, MBA, BCPS, CDE Assistant Professor of Pharmacotherapy and Outcomes Science and has been on faculty at VCU for 8 years. Her areas of expertise include community engagement, service-learning, interprofessional practice, and diabetes and chronic disease management in the safety-net. Achievements include developing and initiating new collaborative clinical pharmacy-integrated services in two Richmond free clinics over the last three years, as well as developing a new Ambulatory Care Pharmacy Residency Program co-funded by CrossOver Healthcare Ministry.

P2-80. Establishment of a Partnership between Academic and Service Institutions To Implement a Faculty Preceptor Model

- Brenda Cassidy, University of Pittsburgh, Pittsburgh, PA, USA
- Cynthia Chew, University of Pittsburgh, Pittsburgh, PA, USA
- Brittany Long, University of Pittsburgh, Pittsburgh, PA, USA

Submitted abstract:

**Background:** Educating primary care providers (PCPs) competent in adolescent health care is both critical and challenging. Alexander, et al. reported that although sexuality discussion between teens and physicians occurred 65% of the time, average discussion lasted only 36 seconds (2014). Inadequate education has been described as a barrier to counseling adolescents (Ozer, et al., 2004; Pattishall, Cruz& Spector, 2011). The IOM Global Forum on Health Professional Education supports multi-disciplinary approaches and partnerships between university-based health institutions (2013). This project supports a novel approach to inter-professional education of nurse practitioner (NP) students and medical residents at a primary care site specializing in adolescent health care.

**Objectives:** A partnership will be evaluated between academic and service institutions, utilizing a preceptor model with NP faculty as a multidisciplinary team member in an adolescent primary care setting. Outcomes measured include cost effectiveness of model and satisfaction and clinical competence of NP students.

**Methods:** NP curriculum is enhanced through participation in didactic sessions for medical residents. A faculty-practice-preceptor model utilizes an NP faculty with expertise in adolescent health care.

Appointed as a clinical professor and member of multidisciplinary team, the NP faculty provides simulation workshops, precepts students and coordinates clinical rotation alongside medical residents. Descriptive analysis will be used to report cost-effectiveness of model and student satisfaction. A clinical competency checklist will measure student clinical outcomes.

**Results:** The partnership has been initiated, course development has occurred and preliminary results will be available April 2014.

**Implications:** A partnership between academic setting and community-based site specializing in adolescent health utilizing a team-based educational approach will produce clinically competent and collaborative-ready PCPs caring for adolescents. This partnership supports multidisciplinary collaboration and will stimulate scholarly activities in adolescent health care that will contribute to improved patient outcomes in this population.

P2-81. Identifying Problems during Transitions of Care and Reasons for Emergency Department Utilization in Community-Dwelling Older Adults

- Antoinette B. Coe, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA
Submitted Abstract:

**Background:** Virginia Commonwealth University has developed an interprofessional health and wellness clinic utilizing advanced practice providers and health professional students. The clinic focuses on older adults residing in a Section-8 apartment building. In 2012, prior to clinic start-up, there were 112 emergency department (ED) ambulance transports for the 247 residents. Of concern is the risk for adverse events, poor health outcomes, and a potential for costs to increase due to communication breakdowns in transitions of care and non-urgent ED use.

**Objectives:** 1) Identify and categorize reasons for ED use. 2) Identify and categorize reasons for problems that occur during the transition from ED to a participant’s residence.

**Methods:** This study applies a mixed-methods approach. Residents will be eligible to participate if they have visited an ED within the immediate past 14 days. Semi-structured interviews will be used to characterize residents’ problems encountered during care transitions from the ED to their residence, reasons for their occurrence, and the reason for their ED use. Coleman’s Care Transition Intervention provides the basis for questions to identify care transition problems, with a focus on medication management, provision of a personal health record, follow-up care, and knowledge of warning signs and symptoms of a worsening condition and how to respond. A structured questionnaire will be read to residents; responses will be recorded to collect demographics, health-related variables, and their use of the interprofessional care coordination clinic. A qualitative content analysis will be performed to identify and categorize themes related to ED utilization and care transition problems. Descriptive statistics (means, SD, frequency, %) will be used to describe the participants.

**Results:** In progress.

**Implications:** Strategies to decrease ED use for non-urgent conditions and methods to improve transitions of care for community-dwelling older adults will be formulated.

**Author Biographies**

Antoinette B. Coe, PharmD Dr. Coe is a doctoral graduate student in the School of Pharmacy, Virginia Commonwealth University (VCU) and graduate research assistant with the Office of Assessment and Evaluation Studies, VCU School of Medicine. She received her PharmD from VCU in 2009 and completed a VCU Community Pharmacy Practice Residency in 2010. She is a 2013-2014 American Foundation for Pharmaceutical Education Pre-Doctoral Fellow in Pharmaceutical Sciences.

Leticia R. Moczygemba, PharmD, PhD Dr. Moczygemba is an Assistant Professor, School of Pharmacy, Virginia Commonwealth University. Her research focuses on working with marginalized groups to improve medication-related health outcomes. She has developed and evaluated interdisciplinary care models to improve health outcomes using patient-centered strategies that facilitate self-management of chronic diseases. Dr. Moczygemba received her PharmD and PhD from The University of Texas in 2004 and 2008, respectively.

Pamela L. Parsons, PhD, RN, GNP-BC Dr. Parsons serves as an Assistant Professor and Nurse Practitioner within the VCU Department of Internal Medicine and is an Affiliate faculty within the School of Nursing. She serves as project director on the Richmond Health and Wellness Program (RHWP): Expanding
Nurse-Led Interprofessional Collaborative Practice (PCP) Teams for Community-Dwelling Older Adults. NEPQR HRSA Grant No UD7HP26044 (2013-2016).

P2-82. Social Acceptance: Working with Community Members in an Interdisciplinary Community Health Model

- Sierra Alewine, Virginia Commonwealth University, Richmond, VA, USA
- Leland Waters, Virginia Commonwealth University, Richmond, VA, USA
- Pamela L. Parsons, Virginia Commonwealth University, School of Medicine, Richmond, VA, USA

Submitted abstract:
Background: Older adults with high chronic disease burden, living in Section 8 independent living communities have significantly disadvantaged healthcare options. The Dominion Place Health and Wellness Clinic (DPHWC) was established in 2012 to provide on-site health services and social support to this patient population, addressing the challenges of patient distrust of the local medical community. The clinic also serves as an opportunity to provide interprofessional geriatric clinical training for nursing, medical, pharmacy, and social work students at Virginia Commonwealth University (VCU).

Objectives: We aim to provide an interprofessional healthcare clinic in a familiar setting at convenient times. This requires building trust in order to engage residents in a new type of on-site support service. This presentation will detail strategies utilized to build trust among the residents of Dominion Place and the resultant increase of participation from clinic start-up to present day.

Methods: A town hall meeting was held prior to clinic start-up in which 57 of the 249 residents attended. Resident identified needs and services were established which laid the groundwork for education and targeted chronic disease management for the clinic. A Resident Ambassador was enlisted to help liaison between the clinic and residents. Staff engaged the support of the on-site resident supervisor who was further help in facilitating trust and communication.

Results: DPHWC has been successful in expanding and sustaining the clinic practice. The clinic enrolled 58 participants the first semester with 155 completed visits. By the fourth semester, 108 participants were enrolled with 784 completed visits. Over 100 students from various disciplines have worked at the clinic thus far.

Implications: The unique opportunity of interprofessional healthcare teams delivering care directly to their home environment presents an exclusive avenue for underserved older adults to increase their awareness of their well-being and to gain the trust of healthcare providers.

Author Biographies
Sierra Alewine, B.S. Ms. Alewine is a Master’s of Science candidate at Virginia Commonwealth University’s Department of Gerontology. She received her B.S. in Health Communications and minor in gerontology from James Madison University. Ms. Alewine is the Clinic Coordinator for the Richmond Health and Wellness Program.

Leland Waters, MSG, Ph.D Dr. Waters is the assistant director for the Virginia Geriatric Education Center and manages the statewide Geriatric Training and Education (GTE) initiative at Virginia Center on Aging. He is also Treasurer for the Association of Gerontology in Higher Education (AGHE) and is on the Board of Directors for the National Association of Geriatric Education Centers.
Pamela Parsons, Ph.D, RN, GNP-BC Dr. Parsons serves as an Assistant Professor and Nurse Practitioner within the VCU Department of Internal Medicine and is an Affiliate Faculty within the School of Nursing. She is project director for the The Richmond Health and Wellness Program (RHWP): Expanding Nurse-Led Interprofessional Collaborative Practice (PCP) Teams for Community-Dwelling Older Adults. NEPQR HRSA Grant No. UD7HP26044 (2013-2016).

P2-83. Preparations for Interprofessional Team Learning
- **Bente Kvilhaugsvik**, Stord/Haugesund University College, Stord, Norway

Submitted abstract:
National guidelines of today ask health educations in Norway to prepare their students for Interprofessional Collaborative Practice. A new project is now being launched, in which three colleges are involved. As the colleges vary both in size and the variety of health educations, one with only nurse education, another with nurse, medical laboratory technician and social educator trainings, and the third also including social work and child welfare training, the conditions for interprofessional education also vary, and none of these colleges have any therapeutical trainings (OT, physio). The question is: to what extent may ICT be a helpful tool for interprofessional learning? The project will include online student learning as well as tasks and training in placement situations, and preparations for teachers and facilitators. The project will involve a great number of teachers, health workers as well as students. Working together across three colleges is anticipated giving synergetic effects, inspiration and a basis for comparison of conditions needed for successful interprofessional learning.

P2-84. Substance Use Assessments and Brief Interventions in Emergency Departments
- **Lynn Boucek**, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- **Ann M. Mitchell**, University of Pittsburgh, School of Nursing, Pittsburgh, PA, USA
- **Dawn Lindsay**, Institute for Research, Education, and Treatment in Addictions, Pittsburgh, PA, USA

Submitted abstract:
**Background:** In the United States, 23.1 million people aged 12 and older need treatment for alcohol and other drug (AOD) use; less than 10% receive specialty care. Four to 31% of all patients treated in Emergency Departments (EDs) test positive for alcohol use; up to 50% of the severely injured trauma patients in EDs test positive for alcohol use. Emergency Department registered nurses (EDRNs) can readily assess patients for high-risk substance use through implementing the evidence-based screening, brief intervention, and referral to treatment (SBIRT) program.

**Objectives:** The purpose of this project was to train EDRNs in SBIRT and integrate SBIRT into ED clinical processes.

**Methods:** University of Pittsburgh School of Nursing partnered with the Institute for Research, Education, and Training in Addictions (IRETA) to teach SBIRT to 117 EDRNs and other personnel in an underserved urban hospital, an underserved rural hospital, and a suburban hospital. SBIRT training consisted of a 1.5 hour face-to-face training session, a 1 hour online CEU course, and an individualized booster session in the ED. Pre- and post-training assessment measures included the Alcohol and Alcohol
Problems Perception Questionnaire (AAPPQ) and the Drug and Drug Problems Perception Questionnaire (DDPPQ), and the SBIRT Knowledge Questionnaire.

**Results:** Outcome data indicates EDRNs and staff responded positively to the training with significant attitudes, perceptions, and knowledge improvement from pre-training to post-training as reported on the AAPPQ, DDPPQ, and SBIRT Knowledge Scale. Qualitative data indicated EDRNs and staff retained improvements over time. Documenting SBIRT requires additional informatics upgrades.

**Implications:** Training EDRNs in SBIRT offers opportunities for earlier AOD use identification and brief interventions before specialty care is required. The improved quality of ED patient-centered SBIRT care for these patient populations complies with newly proposed hospital Joint Commission screening performance measures.

P2-85. Personality and overeating behaviour: What is the relationship between body mass index and the interaction between the Behavioral Inhibition System and the Behavioral Approach System?

- **Sonya Tsancheva,** University of Essex, Colchester, England, UK
- **Pieter du Toit,** University of Essex, Colchester, England, UK
- **Frances Blumenfelt,** University of Essex, Colchester, England, UK

**Submitted abstract:**

**Background:** Overweight and common obesity is the fifth leading risk for global deaths with 2.8 million adults dying each year (WHO, 2013). The recent change of diet and lifestyle patterns towards an increased intake of high calorific foods and decreased physical exercise has been considered as one of the main causes for overweight and obesity. Overeating behaviour might reflect complex interactions between individual differences as determined by genetics and their interaction with the environment, especially when the latter is characterised with widely available palatable food that is not consumed solely as a source of nutrition, but also as a reward that in itself promotes eating (Gosnel & Levine, 2009). However, despite this global shift of diet and lifestyle, not everyone is on the pathway to becoming overweight and obese. The Reinforcement Sensitivity Theory of personality revised (RST---R; Gray, 1982; Gray & McNaughton, 2000; McNaughton & Corr, 2004, Corr & McNaughton, 2008) provides us with a theoretical framework based on reward and punishment mechanisms and how these underlie emotions, motivation and behaviour. Thus, a factor that may explain the variance in individual differences in food intake is one’s levels of sensitivity to reward, punishment and impulsivity.

**Aims:** The present study aims to explore the relationship between sensitivity to reward and punishment at trait level, eating styles and BMI.

**Method:** An online cross-sectional design was employed for this study. The final sample consisted of 312 participants recruited from the community through a snowballing technique using social networks, support websites for overweight and obese people and websites supporting online surveys.

**Results:** Multiple regression analysis will be conducted in order to explore the relationship between BMI, eating styles and BIS and BAS at trait level. Component analysis will be conducted to provide a validation for the newly developed RST---PQ questionnaire within the formed sample.
Clinical implication: The results of the current study will provide a better understanding of the role of one’s sensitivity to reward and punishment in relation to food intake and it is hoped that this would facilitate the development of better, individually tailored weight intervention programs for patients with obesity.

Author Biographies
Sonya Tsancheva is a third year trainee clinical psychologist on the Doctorate in Clinical Psychology course, University of Essex, England, UK. She is currently employed by the North Essex Partnership University NHS Foundation Trust within the area of mental health. Her research interests are within the areas of personality, eating behaviour and obesity.