

# SYMPOSIUM

## 4th Annual McMaster Waterloo-Wellington Clinical Research and Quality Improvement Symposium

10B Victoria Street South, Kitchener, ON, Canada N2G 1C5

MAY 31, 2017



McMaster  
University  
HEALTH SCIENCES



 Michael G. DeGroote  
SCHOOL OF MEDICINE

# WELCOME

## Dear Community Members,

Welcome and thank you for joining us at the Fourth Annual McMaster Waterloo-Wellington Clinical Research and Quality Improvement Symposium. This exciting event is devoted to research and quality improvement in the Waterloo-Wellington region. The purpose of today is to bring together local trainees, clinicians, professionals, researchers, and health-technology entrepreneurs who are working to improve health care and delivery in our region. We produce outstanding research and quality improvement work in our region. This work spans the continuum from small projects undertaken by individuals to large programs completed by multidisciplinary teams. Clinical research and quality improvement is happening at our universities, hospitals, research institutes, and clinical practices. However, we have few opportunities to collaborate, exchange ideas, and learn together. There are even fewer that connect such a diverse group of stakeholders in health care, research, delivery, and technology – this is our goal for this symposium. We invited local trainees,

clinicians, professionals, researchers, and health-technology entrepreneurs to showcase their work and be recognized for their clinical and scientific excellence. The response has been overwhelming, with over 60 abstracts submitted and accepted to this symposium from across the region. We are excited to welcome Dr. Joanne Ho, Dr. Tom Hupel with Lori-Anne Huebner and Lori Moran from the eHealth Centre of Excellence to deliver our two keynote sessions today. Dr. Joanne Ho is an internist, geriatrician and clinical pharmacologist who will be speaking about her project; GeriMedRisk. Dr. Ho is an internist, geriatrician and clinical pharmacologist who will be speaking about her project; GeriMedRisk. Dr. Hupel is currently Medical Director of Surgery at Grand River Hospital, who will be speaking about a new Orthopaedic eReferral program that has now been introduced to the provincial budget alongside Lori-Anne Huebner and Lori Moran from the eHealth Centre of Excellence. We would like to take this opportunity to thank you for attending the 2017 WWCRQI and supporting local research.

## ACKNOWLEDGEMENTS

### PLANNING COMMITTEE

Dr. Andrew Costa  
Graham Campbell  
Amy Doris  
Dr. Mike Lee-Poy

Glenda O'Brien  
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Krystina Bednarowski  
Lindsay Donaldson  
Catherine Arruda  
Certina Ho

Dr. Veronique Boscart  
Megan MacNeil  
Yassmin Behzadian

# CONTENTS

Thank you for making this event a success!  
Sincerely,

**Andrew Costa** PhD

Research Lead,  
Michael G. DeGroot School of Medicine,  
Waterloo Regional Campus

**Graham Campbell** MA

Research Coordinator  
Michael G. DeGroot School of Medicine,  
Waterloo Regional Campus

**Amy Doris**

Research and Education Assistant  
Michael G. DeGroot School of Medicine,  
Waterloo Regional Campus



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## SPECIAL THANKS

Tami Everding  
Dr. Cathy Morris  
Penny Schmiedendorf

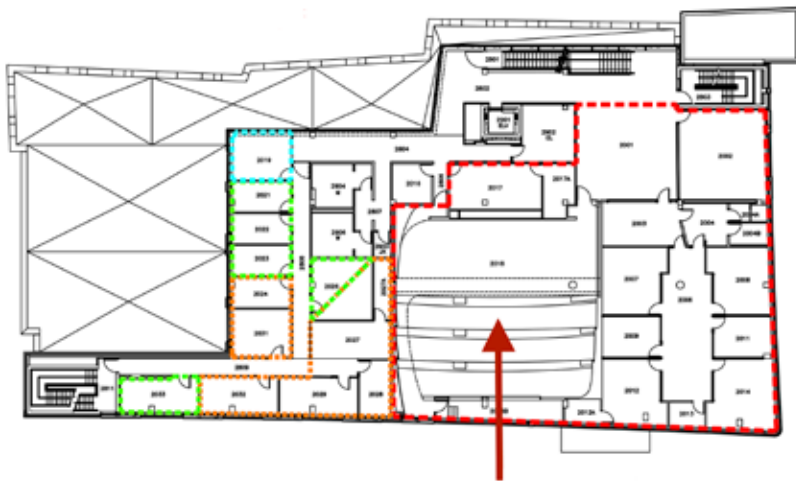
Shauna Boniface  
Tania Del Matto  
Velocity

Alex Sehl  
Communitech  
Stephen Bailey

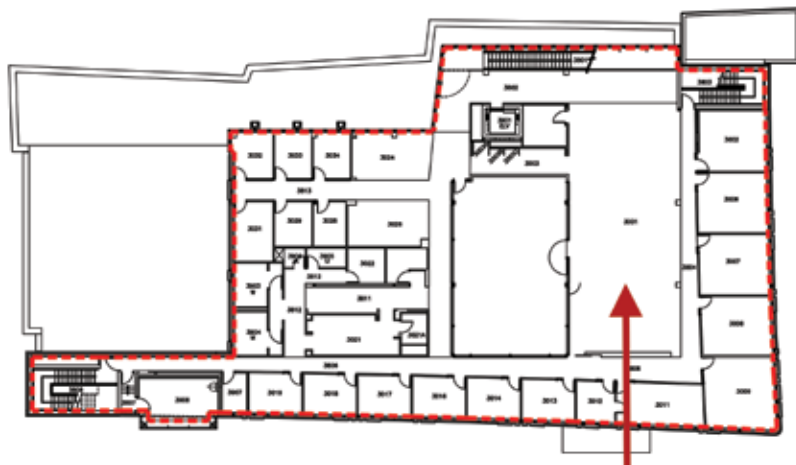
WRC Staff and  
Administration  
Session moderators

# PROGRAM

12:00-12:30 P.M.	<b>CHECK-IN and NUTRITION &amp; COFFEE BREAK</b> WRC Lecture Theatre (2018), Second Floor; Poster Setup, Third Floor atrium
12:30-12:40 p.m.	Welcome, Introduction And Overview WRC Lecture Theatre (2018), Second Floor
12:40-1:10 p.m.	<b>KEYNOTE ADDRESS:</b> Dr. Joanne Ho: GeriMedRisk WRC Lecture Theatre (2018), Second Floor
1:10-2:15 p.m.	<b>POSTER/NETWORKING SESSION 1 and LUNCH</b> WRC Third Floor Atrium
2:15-3:15 p.m.	<b>CONCURRENT PODIUM SESSION 1</b> eHealth and Common Health Information Pharmacy Building (PHR 1008)
2:15-3:15 p.m.	<b>CONCURRENT PODIUM SESSION 2</b> Practice Changes and Challenges WRC Lecture Theatre (2018), Second Floor
3:15-3:25 P.M.	<b>NUTRITION &amp; COFFEE BREAK</b> WRC Second Floor
3:25-5:25 p.m.	<b>CONCURRENT PODIUM SESSION 3</b> Family Medicine Residents Pharmacy Building (PHR 1008) Note: this session runs until 5:25 p.m., with a short break
3:25-4:40 p.m.	<b>CONCURRENT PODIUM SESSION 4</b> Care in the Community for Older Adults WRC Lecture Theatre (2018), Second Floor
4:40-5:30 p.m.	<b>POSTER/NETWORKING SESSION 2 and NUTRITION &amp; COFFEE</b> WRC Third Floor Atrium
5:30-6:00 p.m.	<b>KEYNOTE ADDRESS:</b> Dr. Tom Hupel with Lori-Anne Huebner and Lori Moran from the eHealth Centre of Excellence Diagnostic Imaging For Orthopaedic Patients: The Problem And How E-Referral Can Help WRC Lecture Theatre (2018), Second Floor
6:00 p.m.	Closing Ceremony, Presentation of Honours and Symposium Adjourned WRC Lecture Theatre (2018), Second Floor

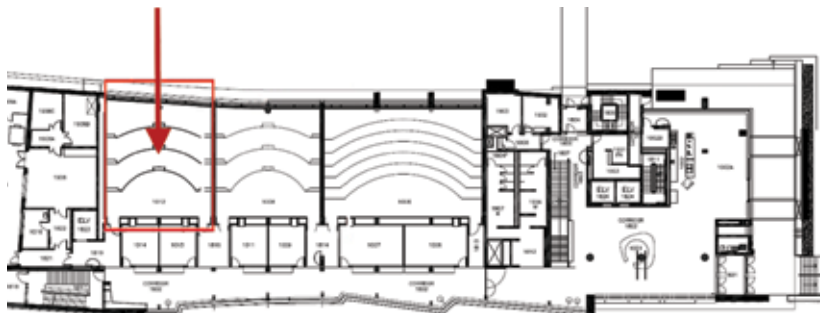


WRC LECTURE THEATRE (2018)



WRC ATRIUM

PHR 1012



# KEYNOTE PRESENTATION

## Keynote speakers



Joanne Man-Wei Ho  
MD, FRCPC, MSC

Joanne Ho is an internist, geriatrician and clinical pharmacologist who researches adverse drug events in the older individual using observational research and systematic review methodologies. She attended the University of British Columbia for her medical undergraduate degree and then completed residencies in internal medicine, geriatric medicine and clinical pharmacology at the University of Toronto. Her Masters of Science was completed at the Institute for Health Policy, Management and Evaluation during which time she participated in the Department of Medicine Eliot Phillipson Clinician Scientist Training Program at the University of Toronto. Joanne Ho recently completed a research fellowship with the Li Ka Shing Knowledge Institute through the University of Toronto Division of Geriatric Medicine and she is also an examiner with the Royal College of Physicians and Surgeons of Canada for Clinical Pharmacology and Toxicology. Joanne Ho is currently affiliated with Grand River Hospital and recently joined at McMaster University as an Assistant Professor in the Department of Medicine, Division of Geriatric Medicine. She is piloting GeriMedRisk, a geriatric pharmacology consultation and knowledge translation service for clinicians in the Waterloo-Wellington Region.



Thomas Hupel  
MD, FRCSC

Dr. Hupel obtained an undergraduate Honours of Bachelor of Science degree and a Masters of Science degree from McMaster University in the field of molecular biology. Thereafter he entered the Faculty of Medicine at the University of Toronto. After graduating from the MD program with honours, he completed a residency in orthopaedic surgery through the Department of Surgery at the University of Toronto. Dr. Hupel then completed a post graduate Fellowship at St. Michael's Hospital in Toronto. Working under the supervision of Dr. James Waddell, Dr. Emil Schemitsch and Dr. Michael Mckee he received subspecialty training in the fields of orthopaedic trauma, and upper and lower extremity joint reconstruction.

Dr. Hupel relocated to the Kitchener-Waterloo area in 1999 and is presently in independent practice with subspecialty interests including primary and revision arthroplasty of the lower extremity as well as an interest in shoulder arthroscopy and shoulder arthroplasty. Dr. Hupel became the Regional Educational Leader for undergraduate orthopaedic education at the Waterloo Campus in 2012. Dr. Hupel was the Chief of Orthopaedics at Grand River Hospital and St. Mary's General Hospital from 2010-2016. He is currently the Medical Director of Surgery at Grand River Hospital.

## Keynote speakers



Lori-Anne Huebner

Lori-Anne Huebner is the Benefits Realization Practice Lead at the eHealth Centre of Excellence (eCE), located in the Idea Quarter of Waterloo, Ontario. Lori-Anne brings to this position an extensive background in conducting evaluation and research projects having partnered with several healthcare and community programs over the past 20 years, in both Alberta and Manitoba. Since moving to Waterloo in 2015, Lori-Anne has become a strong advocate of using benefits evaluation to drive the adoption of digital health tools across the south west Ontario region, with her current work focusing on the development of case studies that identify the realized clinical and organizational value of ehealth solutions within workflows spanning the care continuum. Together with her colleagues, Lori-Anne recently published a benefits evaluation model and had opportunity to present on her work at the Information Technology and Communication in Health conference in Victoria, BC. She has also presented at the OntarioMD EMR Every Step conference on the usability and utility of standardized data within electronic medical records, and serves as the PI on a current research project exploring the use of narcotics data within the electronic health record (EHR) as an enabler for care decisions as it relates to the opioid crisis in Ontario. Lori-Anne is passionate about employing benefits evaluation to encourage uptake of digital health tools amongst clinicians, thereby enabling them to use the technology available to provide an enhanced quality of care to their patients.



Lori Moran

As the System Coordinated Access (SCA) Program Manager at the eHealth Centre of Excellence, Lori Moran plays an instrumental role in improving access to care by leading the development of a fully integrated referral management strategy for the Waterloo Wellington region. Lori brings a wealth of knowledge and experience to the role, drawing from a wide-ranging history of large and complex project management initiatives within a healthcare setting. During her fourteen years at Grand River Hospital, Lori transitioned to the role of Director of Corporate Projects where she established a project management framework that enabled the organization to achieve project execution excellence through holistic, repeatable, consistent project management practices. An enthusiastic and trusted leader, Lori has a passion for using project management strategies to improve patient experience and outcomes.

# OUR PARTNERS AND SPONSORS

We are delighted to welcome the following local Health & Technology Innovators:



Thank you to our sponsors:





# ORAL PRESENTATIONS



Scan for full abstract listing

**SESSION ONE** – 2:15-3:15 p.m.  
Pharmacy Building (PHR 1008)

## eHealth and Common Health Information

**0-1:** Informing prescribing decisions and improving patient care through the Digital Health Drug Repository (DHDR)

Julia Bickford\*, Lori-Anne Huebner, Ted Alexander, Mohamed Alarakhia  
eHealth Centre of Excellence

**0-2:** Medication Review of Medically Complex Patients using Standardized Data

Kathryn Flanigan\* and Jillian Bauer\*  
Centre for Family Medicine

**0-3:** Mental Health Encounters in Primary Care: How Clinicians Can Use Technology to Support Evidence Based Care

Mohamed Alarakhia, BSc, MD, CCFP; Stephanie Chin\*, RPN, BSc, Dipl. HI; Lirije Hyseni\*, MSc; Danika Walden, PMP, MSc  
Centre for Family Medicine Care Innovations

**0-4:** Inventory of Tools in Comprehensive Geriatric Assessment in the WWLHIN

Julia Borges\*, Dr. George Heckman, Jane McKinnon Wilson  
University of Waterloo;  
Canadian Mental Health Association  
Waterloo-Wellington

**SESSION TWO** – 2:15-3:15 p.m.  
WRC Lecture Theatre

## Practice Changes and Challenges

**0-5:** Evaluating change in mental health symptoms over time using the interRAI Community Mental Health instrument

Jerrica Little\*, John P. Hirde  
University of Waterloo

**0-6:** Investigation into the vision needs of refugee patients settling in the Waterloo Region

Sarah MacIver\*, Aysha Hassan OD, Alexander Hynes  
University of Waterloo

**0-7:** Ready or not? Pharmacist perceptions of a changing injection scope of practice before it happens

Ai-Leng Foong\*, David J Edwards, Sherilyn Houle, Kelly A Grindrod  
University of Waterloo

**0-8:** Measuring functional change following outpatient rehabilitation using the interRAI Community Rehabilitation Assessment

Luke Turcotte\*, Dr. John Hirdes  
University of Waterloo

# FAMILY MEDICINE QUALITY IMPROVEMENT SESSIONS

**SESSION THREE** – 3:25-5:30 p.m.  
Pharmacy Building (PHR 1008)

## Family Medicine Quality Improvement Sessions

**O-9:** Impact of a half day workshop on family medicine residents' knowledge, subjective preparedness, attitudes, and behaviours towards poverty in medicine

Drs. Julie Chaytor\*, Fiona Clarke\*, Alisa Loo\*

Department of Family Medicine, Centre for Family Medicine, McMaster University, Kitchener-Waterloo, Canada

**O-10:** Prenatal Care at Groves Memorial Community Hospital: Evaluating current practices and exploring interest in Group Prenatal Care

Dr. Sarah Donaldson, MD, BHSc\*, Dr. Alanna May, MD, RN, BScN, BA, PNC(C)\*  
Groves Memorial Community Hospital, Fergus, Ontario

McMaster University, Department of Family Medicine, Hamilton, Ontario

**O-11:** Effect of an educational session on family medicine residents' beliefs and management of obesity

Drs. Mohammed Dawood\*, Matt Johnson\*, Alex Ma\*, Sandy McLachlan\*, Andrew Stewart\*

Department of Family Medicine, Centre for Family Medicine, McMaster University

**O-12:** Will the use of simulation training improve family medicine residents' knowledge and comfort with acute care?

Drs. Nathan Roth\*, Melissa Snyder\*, Allison Yantzi\*

Department of Family Medicine, Centre for Family Medicine, McMaster University, Kitchener-Waterloo, Canada

**O-13:** Application and Feasibility of Practice-Based Small Groups (PBSGs) in a Rural Community: A Quality Assurance Project

Drs. Asha Bienkowski\*, Daneilla Dimitri\*

Family Medicine Post Graduate, Department of Family Medicine, McMaster University

**O-14:** Pertussis immunization in pregnant patients at a Kitchener Family Health Team

Drs. Katherine Li\*, Joanna Wielgosz\*

New Vision Family Health Team  
Department of Family Medicine, McMaster University

**O-15:** Current practices regarding group A streptococcal rapid antigen testing and subsequent confirmatory throat cultures within the Centre for Family Medicine Family Health Team: a retrospective chart review

Drs. Chris Johansen\*, Patrick Keating\*, Pierre Lenferna De La Motte\*, David Martin\*  
Department of Family Medicine, Centre for Family Medicine, McMaster University, Kitchener-Waterloo, Canada

### **Care in the Community for Older Adults**

**O-16: Development of the CHES-Lite Scale to Predict at the Point of Home Care Entry**

Chi-Ling Joanna Sinn\*, Dr. Jeff Poss,  
Dr. John Hirdes  
University of Waterloo

**O-17: An Interprofessional and Collaborative Approach to Care for Seniors with Addictions**

Marilyn White-Campbell\* Jessica Wilson  
St Joseph's Health Care Center Guelph

**O-18: "I would hope the people looking after me know about me": Perspectives of Persons Living with Dementia and Their Caregivers on Person-Centred Care and Quality of Care**

Bryan B. Franco\*, George A. Heckman,  
Sherry Dupuis, Lisa Loiselle,  
Veronique Boscart, Linda Lee  
University of Waterloo

**O-19: The Impact of Home Care Services on Same Day Emergency Department Utilization**

Aaron Jones\*, Andrew Costa  
McMaster University

**O-20: Assessment of practicing community pharmacists knowledge, attitudes and behaviour towards influenza vaccine hesitancy in Ontario - An exploratory study**  
Pullagura GR\*, Waite N, Violette R,  
Houle SKD  
University of Waterloo

# POSTER PRESENTATIONS



Scan for full abstract listing

**SESSION ONE** – 1:15-2:15 p.m. and **SESSION TWO** – 4:40-5:30 p.m.  
WRC Third Floor Atrium

**P-1: The Voice of the Senior –  
“Please Help Me To Tell My Story Once”**

Jane McKinnon Wilson, Audrey Devitt,  
Tiffany Symes, Cathy Sturdy-Smith\*,  
Kathleen Purdon\*, Emily Vines\*  
St. Joseph’s Health Care Centre,  
Canadian Mental Health Association  
Waterloo Wellington and Regional  
Geriatric Program Central

**P-2: Alcohol Use in Older Adults:  
a Review of Drinking Risks and  
Alcohol Use Disorders to Inform the  
Development of National Guidelines**

Eunice Indome\*, Dr. David Conn,  
Ms. Marilyn White-Campbell  
University of Waterloo

**P-3: Is There An Optimal Cut-Off  
MoCA Score That Can Be Used  
As An Indicator of Dementia?  
A Scoping Review**

Jennifer Lee, Andrea Chen,  
Jason Locklin\*, Linda Lee, Tejal Patel  
McMaster University

**P-4: Medical Assistance in Dying: Key  
Policy Considerations for Long Term Care**

Gerard Reuss\*, Dr. Fred Mather, Connie  
Lacy, Lisa Sutherland  
Sunnyside Long Term Care

**P-5: Associations Between staffing  
Hours and Quality of Care Indicators  
in Long-Term Care: Results From a  
Cross-Sectional Cohort Study**

Meaghan Davey\*, Andrew Costa,  
Jeffrey Poss, Veronique Boscart  
McMaster University

**P-6: Individuals with Sensory and  
Cognitive Impairments Face Additional  
Challenges Compared to Those with  
Cognitive Difficulties Alone:**

**Analysis of interRAI Data for  
Home Care and Long-term Care**  
N. Williams\*, D.M. Guthrie,  
J.G.S. Davidson, N. Phillips, W. Wittich  
Wilfrid Laurier University

**P-7: Spending wisely: Home Care  
Assessment Cost in Ontario**

Sophie Hogeveen\*, Chi-Ling Joanna Sinn\*,  
John Hirdes  
University of Waterloo

**P-8: The Development of Quality  
Indicators for Seriously-ill Home Care  
Clients in Ontario**

Lisa Harman,\* Nicole Williams,  
Dr. Dawn Guthrie  
Wilfrid Laurier University

**P-9: The Impact of Prescription Medication Cost Coverage on Optimal Adherence to Hypertension and Diabetes Medications: A Repeated Cross-sectional Population-based Study**

Mrs. Razan Amoud (BScPharm, MSc Student), Dr. Mhd Wasem Alsabbagh (BScPharm, PhD)  
University of Waterloo

**P-10: Factors Influencing Prescription of Riluzole for ALS Patients in Ontario Home Care**

Yong-Jin Kim\*, George Heckman, Susan Horton, Christopher Perlman  
University of Waterloo

**P-11: Overcoming Barriers to Clinical Harm Reduction Interventions**

Michael A. Beazely\*  
University of Waterloo

**P-12: Electronic Medication Adherence Technologies: Classification to Guide Use in the Older Adults**

Maheen Farooqi Bsc.(c) ; Caitlin Carter, HBA, MLIS; \*Tejal Patel, PharmD  
University of Waterloo School of Pharmacy

**P-13: Integrating Best Practices through EMR Decision Support Tools**

Mohamed Alarakhia BSc, MD, CCFP; Lirije Hyseni MSc; Danika Walden PMP, MSc  
Centre For Family Medicine Care Innovation

**P-14: Evaluating Perceived Barriers to EMR Adoption in Kitchener, Ontario**

Chen, M.\* , To, E.\* , Yeung, K.\* , Lo, C.  
McMaster University

**P-15: Playing Telephone: Understanding the state of medication decision making in growing healthcare teams in the time of electronic health records**

Mercer Kathryn, Burns Catherine, Guirguis Lisa, Abidi Samina, Boersema Jonathan, Chabot Christian, Chin Jesse, Dogba Joyce, Guénette Line, Légaré France, McKinnon Annette, Waked Khrystine\*, Grindrod Kelly  
University of Waterloo

**P-16: E-Consultation: Building Capacity for Spinal Cord Injury Primary Care**

James Milligan, Joe Lee, Cathy Craven, Dalton Wolfe, Craig Bauman  
McMaster University

**P-17: Is smartphone application-based patient feedback a good idea? "It depends."**

Ng, Denise\*, MSc candidate; Wallace, James PhD; McMurray, Josephine, PhD; and Morita, Plinio, PhD  
University of Waterloo

**P-18: Assessment of the Latest Evidence on Diagnosis, Management and Prognosis of Complex Febrile Seizures in Children**

Kia Gilani, Diana De Santis, Natasha Mense-Dietrich  
McMaster University WRC

**P-19: Development of a theoretical framework for assessment of quality of primary care medical service trips**

Dainton, C\*, Gorman, C, Chu, CH, Cherniak, W.  
McMaster University

**P-20: A Retrospective Chart Review of Critically Ill Patients in the Emergency Department**

Chan, D., Kolev, D., Lien, K., Wang, Y., & Tong, X.C.

McMaster University

**P-21: Assessing the current practices and opinions of anesthesiologists in the Kitchener-Waterloo-Cambridge area regarding intraoperative phenylephrine administration during elective cesarean sections**

Yu J\*, Puopolo L, Latchford K

McMaster University

**P-22: Development of Transgender Healthcare Curriculum Competencies Using the Delphi Method**

Dr. Michael Lee-Poy\*

Dr. Colleen McMillan

McMaster University

**P-23: The Development of IPAGE: An Online Platform for Geriatric Education**

Jessica Ashbourne, Brendan Lew, Graham Campbell, Andrew Costa

McMaster University

**P-24: Enhancing diversity exposure at McMaster University Implementation of minority-group standardized patients in clinical skills education**

David Nguyen\*, Mark Xue\*, Rasika Singh\*, Kaitlyn Howden\*

McMaster University

**P-25: Using a quality improvement approach to enhance curriculum domain integration within the McMaster Undergraduate Medical Education (UGME) program COMPASS curriculum**

Rosalind Bihun\*, Breanne Golemiec\*, Jasmine Levesque\*

McMaster University

**P-26: Increasing student confidence in PBL's consistent coverage of curricular concepts across tutorials: a quality improvement in medical education pilot project**

Rebekah Baumann\*, Yassmin Behzadian\*,

Rhys Abdeen Linthorst\*, Ifrah Shah\*

McMaster University

**P-27: EAT (Efficacy & Attitudes of Teaching) Survey on the Consistency & Quality of Nutrition Education in Ontario-based Medical Schools**

Candice Griffin & Patsy Lee

McMaster University

**P-28: The More-2-Eat Project: Key nutrition care changes in hospitals implementing the INPAC pathway**

Valaitis, R.\*; Laur, C., McNicholl, T.,

Keller, H.

University of Waterloo

**P-29: The More-2-Eat project: associations between measures of frailty and nutritional status in patients at nutritional risk**

McNicholl, Tara\*; Keller, Heather;

Laur, Celia; Valaitis, Renata;

Dubin, Joel A.; Mourtzakis, Marina;

Curtis, Lori; Nasser, Roseann;

Laporte, Manon

University of Waterloo

**P-30: Making the Most of Mealtimes (M3): Differences in person-centered care (PCC) delivery during mealtime eating assistance among residents living in long-term care facilities located across Canada**

Sarah Wu\*, Susan Slaughter,

Jill Morrison & Heather Keller

University of Waterloo





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