

Convergence of Health Policy and Evidence –
Bridge Over Troubled Water

Conference Program

Annual CAHSPR Conference

May 13 – 15, 2014 • Pre-conference Day: May 12, 2014 • Hilton Toronto Hotel • Toronto, ON



CAHSPR ACRSPS

Canadian Association for Health
Services and Policy Research

L'Association canadienne pour la
recherche sur les services et les
politiques de la santé

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Maintenance of Certification



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MAINTENANCE OF CERTIFICATION

Attendance at this program entitles certified Canadian College of Health Leaders members (CHE / Fellow) to 1.25 Category II credits for Pre-Conference: Writing Blogs; 1.75 Category II Credits for Pre-Conference: What Makes A good CIHR; and 8.5 Category II credits for the Conference toward their maintenance of certification requirement.



CAHSPR ACRSPS

Canadian Association for Health Services and Policy Research
L'Association canadienne pour la recherche sur les services et les politiques de la santé

Welcome to the 2014 CAHSPR Conference

It is our pleasure to welcome you to the 2014 CAHSPR Conference, our eleventh, held this year in Toronto. In keeping with CAHSPR's mission to bring together health services researchers with decision makers, this year's conference is entitled "Convergence of Health Policy and Evidence – Bridge Over Troubled Water". We expect our largest attendance ever for a CAHSPR conference, so you should find old friends and new acquaintances with whom to share your love and passion of health services and policy research.

Several of our plenary sessions promise to advance this theme of convergence. In the opening plenary session, Tim Evans from the World Bank will set the stage for the discussion of the role of evidence in policy making, with Dr. Danielle Martin from the Women's College as a discussant. This year, CAHSPR is pleased to highlight the work of the Healthcare Innovation Working Group of the Council of the Federation. In a Tuesday afternoon plenary session, we are delighted that three Ministers of Health, Deb Matthews from Ontario, Fred Horne from Alberta, and Doug Graham from the Yukon will share their thoughts on how evidence informs policy development. Throughout the day, sub-plenary sessions will explore the three priority areas of the Working Group, namely, seniors, drugs and appropriateness. (What happened to sex, drugs and rock and roll? At least we have the subtitle of our conference left!

On Wednesday, Dr. Patricia Martens, our Hall Laureate for 2014 will speak on "Making Research Stick." CIHR will make its presence felt at the conference in a plenary session where the new draft strategy for health services and policy research for Canada will be presented and discussed. Space does not permit us to mention all of the wonderful sub-plenary sessions you can choose from at this year's conference. It is a veritable buffet for the mind.

Once again, the conference will provide an opportunity for CAHSPR's theme groups to meet. Researchers and policy makers with a special interest in the areas of Child and Maternal Health, Primary Health Care, Mental Health, Collaborative Healthcare Improvement Partnerships, Applied Research in Cancer Care, and Health Human Resources will have a chance to meet with colleagues who share their interests.

Of course, CAHSPR thrives on the energy of its student participants. We have a dedicated student theme group, and we expect to see Canada's future leaders make their debut in our poster sessions and rapid fire presentations. We also expect lots of energy at our early morning "CAHSPR on the Move" event.

We would particularly like to thank Tom Closson and Walter Wodchis who co-chaired the program committee, and all of the committee members who planned this year's event. Special thanks to Susan Bronskill and Sabrina Wong for leading the abstracts review process. Finally, we thank Sally Cleford and her team at Face2Face Events Management for all their hard work to make this year's conference a success.

We hope you enjoy the conference. You can learn more about CAHSPR at our newly redesigned website www.cahspr.ca. Please join us at the CAHSPR Annual General Meeting on Tuesday, May 13 at noon in Toronto Ballroom II.

We look forward to greeting all of you this week.

With best wishes

Jeremy Veillard
President
Canadian Association for Health Services and Policy Research

Frank Markel
Executive Director
Canadian Association for Health Services and Policy Research



Thank you to the Conference and Local Planning Committees for their continued commitment and support

Jeremy Veillard President, Canadian Association for Health Services and Policy Research

Frank Markel Executive Director, Canadian Association for Health Services and Policy Research

Tom Closson Vice Chair, Canadian Foundation for Healthcare Improvement, Board Member of Health Quality Ontario and LifeLabs (Conference Co-Chair)

Walter Wodchis Associate Professor, Institute of Health Policy, Management and Evaluation, University of Toronto (Conference Co-Chair)

Sabrina Wong Associate Professor, University of British Columbia (Scientific Co-Chair)

Susan Bronskill Scientist, Institute for Clinical Evaluative Sciences, CIHR New Investigator in the Area of Aging (Scientific Co-Chair)

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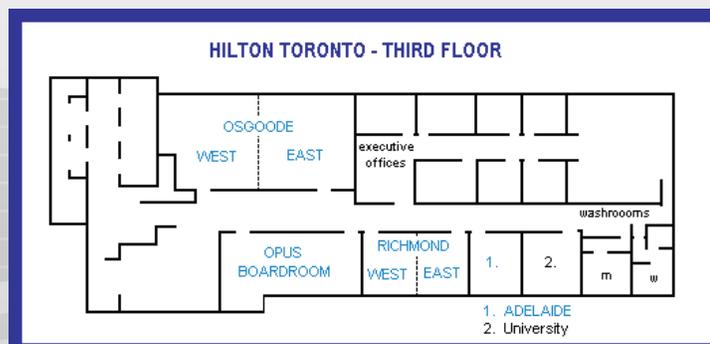
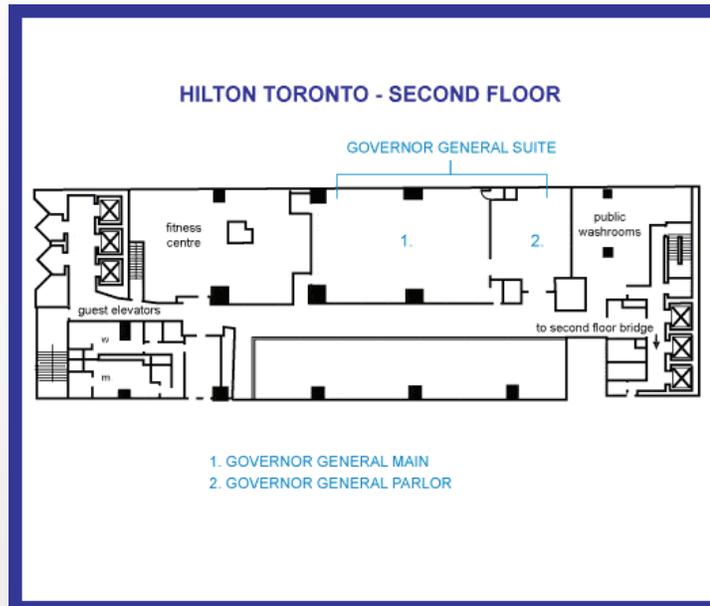
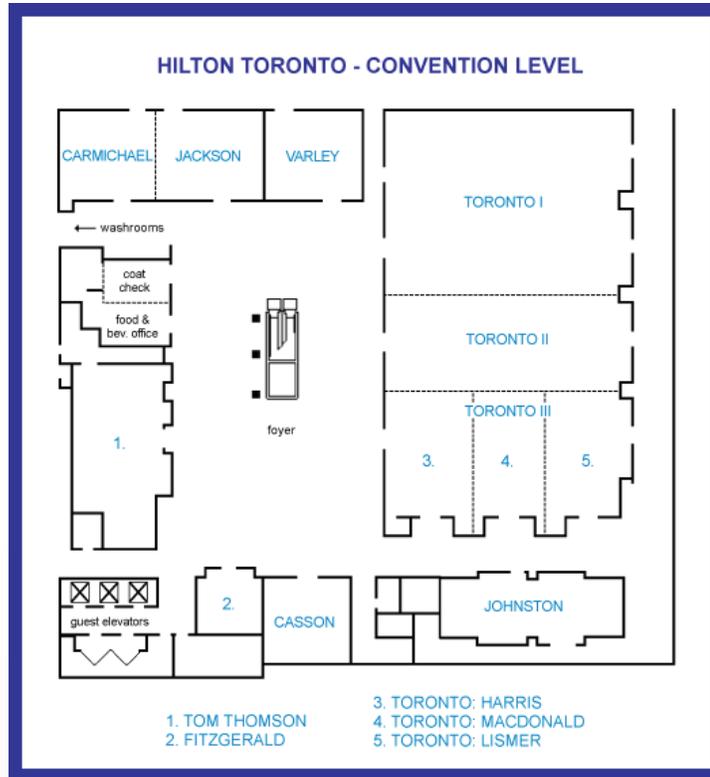
Exhibitors

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Student Travel Bursary Sponsors

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Floorplan



Monday, May 12, 2014 Pre-Conference Day

12:00pm – 1:30pm	CAHSPR Health Human Resources (HHR) Theme Group Business Meeting	Simcoe (Lobby Level)
1:00pm – 4:00pm	Writing Blogs and Op-Eds for Health Services and Policy Research	Osgoode (3rd Floor)
1:00pm – 5:00pm	What Makes A Good CIHR Programmatic Grant?	York (Lobby Level)
4:30pm – 6:00pm	CAHSPR Primary Health Care Theme Group Steering Committee Meeting	Simcoe (Lobby Level)
4:30pm – 6:00pm	CAHSPR Child and Maternal Health Theme Group Business Meeting	Casson (Convention Level)
4:30pm – 6:00pm	Mental Health Theme Group Business Meeting	Johnston (Convention Level)
5:00pm – 6:00pm	Conference Theme Student Primer Meeting	Tom Thompson (Convention Level)
6:00pm – 8:00pm	CAHSPR Conference Welcome Reception	Foyer, Toronto Ballroom (Convention Level)

Tuesday, May 13, 2014 Conference Day 1

6:15am – 7:30am	CAHSPR on the Move	Meet in Hotel Lobby
7:00am – 8:00am	Networking Breakfast	Toronto Ballroom (Convention Level)
8:00am – 8:30am	Opening Remarks	Toronto Ballroom (Convention Level)
8:30am – 8:45am	Rapid Fire Poster Presentations	See pages 63 – 67 Toronto Ballroom (Convention Level)
8:45am – 9:45am	Keynote Presentation	Toronto Ballroom (Convention Level)
9:45am – 11:00am	Poster & Display Viewing	Governor General Suite (2nd Floor)
11:00am – 12:00pm	Sub-Plenary Sessions – Helping to Build Bridges: How can research inform policy?	
	SP1.1 Healthy Aging In The Community With A Particular Emphasis On Care In The Community Rather Than Institutions And Addressing Needs Related To Dementia	Toronto II & III (Convention Level)
	SP1.2 Policy Imperatives for Pharmaceutical Coverage and the Role of Pricing	Toronto I (Convention Level)
	SP1.3 Adoption Of Appropriateness Best Practices Related To The Underuse, Overuse And/Or Misuse Of Medical Tests And Procedures	Jackson (Convention Level)
12:00pm – 1:00pm	Networking Lunch	Toronto Ballroom I (Convention Level)
12:00pm – 1:00pm	CAHSPR Annual General Meeting	Toronto Ballroom II (Convention Level)
1:00pm – 2:15pm	CONCURRENT SESSIONS A	See pages 31 – 36
2:15pm – 2:30pm	Transition	
2:30pm – 3:45pm	CONCURRENT SESSIONS B	See pages 36 – 41
3:45pm – 4:00pm	Transition	
4:00pm – 4:15pm	Rapid Fire Poster Presentations	See pages 63 – 67 Toronto Ballroom (Convention Level)
4:15pm – 5:30pm	Keynote Panel Presentation – The Bridge: How Decision-Makers Use Evidence In Health Policy Decisions	Toronto Ballroom (Convention Level)
5:30pm – 6:15pm	Networking Reception	Foyer, Toronto Ballroom (Convention Level)

Wednesday, May 14, 2014 Conference Day 2

6:15am – 7:30am	CAHSPR on the Move	Meet in Hotel Lobby
7:00am – 8:30am	CHIPS Theme Group Steering Committee Meeting	Johnston (Convention Level)
7:00am – 8:30am	Breakfast and Hall Foundation Annual General Meeting	Toronto Ballroom (Convention Level)
8:30am – 8:45am	Rapid Fire Poster Presentations	See pages 63 – 67 Toronto Ballroom (Convention Level)
8:45am – 9:45am	Emmett Hall Lecture – Telling Stories: The Art Of Making Our Research “Stick”	Toronto Ballroom (Convention Level)
9:45am – 11:00am	Poster & Display Viewing	Governor General Suite (2nd Floor)
11:00am – 12:15pm	CONCURRENT SESSIONS C	See pages 42 – 47
12:15pm – 1:15pm	Networking Lunch	Toronto Ballroom (Convention Level)
1:15pm – 2:15pm	Building Bridges: Networking Hour	(Convention Level)
2:15pm – 2:30pm	Transition	
2:30pm – 3:45pm	CONCURRENT SESSIONS D	See pages 47 – 52
3:45pm – 4:00pm	Transition	
4:00pm – 4:15pm	Rapid Fire Poster Presentations	See pages 63 – 67 Toronto Ballroom (Convention Level)
4:15pm – 5:15pm	Keynote Plenary Panel – Our Community: A Conversation about Future Directions for Health Services and Policy Research in Canada with International Comparison and Commentary	Toronto Ballroom (Convention Level)
5:30pm	Mental Health Theme Group Networking Activity	Meet in Hotel Lobby
6:00pm – 7:00pm	Students Speed Networking Event	Foyer, Toronto Ballroom (Convention Level)
7:30pm – 10:00pm	Student Social Event	Meet in Hotel Lobby

Thursday, May 15, 2014 Conference Day 3

7:00am – 8:30am	Networking Breakfast	Toronto Ballroom (Convention Level)
8:30am – 9:30am	Sub-Plenary Sessions	
	SP2.1 How to win friends and influence public policy: Lessons from the front lines	Jackson (Convention Level)
	SP2.2 Embedding Quality Into The System Using Evidence	Toronto II & III (Convention Level)
	SP2.3 Why it is So Hard to Reform Health Care Policy in Canada	Toronto I (Convention Level)
9:30am – 10:45am	Poster & Display Viewing	Governor General Suite (2nd Floor)
10:45am – 12:15pm	CONCURRENT SESSIONS E	See pages 53 – 57
12:15pm – 1:15pm	Networking Lunch & Awards Presentations	Toronto Ballroom (Convention Level)
1:15pm – 2:30pm	CONCURRENT SESSIONS F	See pages 58 – 62
2:30pm – 2:45pm	Transition	
2:45pm – 3:45pm	Keynote Presentation – Award Winning Health Services Researchers	Toronto Ballroom (Convention Level)
3:45pm – 4:00pm	Closing Remarks and Adjournment	Toronto Ballroom (Convention Level)

Conference Agenda

Monday, May 12, 2014 Pre-Conference Day

12:00pm – 1:30pm	CAHSPR Health Human Resources (HHR) Theme Group Business Meeting	Simcoe (Lobby Level)
1:00pm – 4:00pm	<p>Writing Blogs and Op-Eds for Health Services and Policy Research</p> <p>Coordinated by the CAHSPR Student Working Group, the Health System Performance Research Network (HSPRN), and Healthy Debate</p> <p>Led by KAREN BORN; JEREMY PETCH; PAUL TAYLOR; STEVE MORGAN</p> <p>This pre-conference workshop is intended for students and post-doctoral trainees who are interested in learning how to disseminate their research to online audiences. This workshop will provide a basic introduction on how health care blogs and opinion editorials (op-eds) can be effectively used as knowledge translation tools. The interaction portion of the workshop will help integrate learned concepts using sample blogs generated from different areas of research.</p>	Osgoode (3rd Floor)
1:00pm – 5:00pm	<p>What Makes A Good CIHR Programmatic Grant?</p> <p>Presented by ROBYN TAMBLYN, Scientific Director of CIHR's Institute for Health Services and Policy Research</p> <p>Dr. Tambllyn will present the key elements of a strong grant application for CIHR programmatic grants for upcoming and new investigators (PhD students, post-doctoral students, and early career researchers). The session will include tips and techniques for successful grant writing and identify characteristics of high-quality peer reviews. Participants will be asked to assess and critique a CIHR grant application prior to attending the session. During the session, these critiques will be discussed, and the quality of the peer reviews the application received will also be examined. This workshop is an excellent opportunity for trainees and new investigators to build skills necessary for a successful career in attracting research funding.</p>	York (Lobby Level)
4:30pm – 6:00pm	CAHSPR Primary Health Care Theme Group Steering Committee Meeting	Simcoe (Lobby Level)
4:30pm – 6:00pm	CAHSPR Child and Maternal Health Theme Group Business Meeting	Casson (Convention Level)
4:30pm – 6:00pm	Mental Health Theme Group Business Meeting	Johnston (Convention Level)
5:00pm – 6:00pm	<p>Conference Theme Student Primer Meeting</p> <p>Coordinated by the CAHSPR Student Working Group</p> <p>Presented by JEREMY VEILLARD, President, CAHSPR; TOM CLOSSON, CAHSPR Conference Co-Chair; WALTER WODCHIS, CAHSPR Conference Co-Chair, FRANK MARKEL, Executive Director, CAHSPR</p> <p>The CAHSPR-SWG Pre-Conference Primer is a great way for new and returning attendees to become acquainted with the annual CAHSPR Conference! You are invited to join Jeremy Veillard (CAHSPR President) and Frank Markel (CAHSPR Executive Director), along with Tom Closson and Walter Wodchis (2014 CAHSPR Conference Co-Chairs), as they provide an overview of the conference and discuss the significance of this year's conference theme. This is also a great opportunity to hear about CAHSPR's latest initiatives and to ask any questions to our CAHSPR leadership.</p>	Tom Thompson (Convention Level)
6:00pm – 8:00pm	<p>CAHSPR Conference Welcome Reception</p> <p>Sponsored by Canadian Institutes of Health Research - Institute of Health Services and Policy Research</p> <p>Over the last few years, several web-based tools that translate research evidence into policy and practice-friendly information have been developed in Canada. This pre-conference reception will provide a venue for showcasing and sharing these tools in an informal setting where participants will mingle and network. Each of the tools will be showcased at "stations" during the reception and the developers will provide brief introductions to the tool and give participants the opportunity to explore the sites and discover the wealth of materials being made available and understand how these resources can support their own work.</p>	Foyer, Toronto Ballroom (Convention Level)

Tuesday, May 13, 2014 Conference Day 1

6:15am – 7:30am	<p>CAHSPR on the Move</p> <p>Morning exercise coordinated by the CAHSPR Student Working Group</p> <p>Start your day with a brisk morning run or walk around downtown Toronto. Coffee-fueled, enthusiastic guides will meet you in the hotel lobby, armed with maps of the most scenic routes we could muster. Have your photo taken (and maybe even tweeted) by one of our volunteers! For those who would like to go out on their own at a later time, guide maps will be available at the SWG table and at http://cahspr.ca/en/themegroups/student</p>	Meet in Hotel Lobby
7:00am – 8:00am	Networking Breakfast	Toronto Ballroom (Convention Level)
8:00am – 8:30am	<p>Opening Remarks</p> <p>Presented by JEREMY VEILLARD, President, CAHSPR; TOM CLOSSON, CAHSPR Conference Co-Chair; WALTER WODCHIS, CAHSPR Conference Co-Chair</p>	Toronto Ballroom (Convention Level)
8:30am – 8:45am	<p>Rapid Fire Poster Presentations</p> <p>(Presentations are listed in the language in which they will be presented)</p>	See pages 63 – 67
RF1.1	<p>The Journey towards Benchmarking in Long-Term Care (LTC) Public Reporting</p> <p>Presented by BERNADEE KOH-BILODEAU, Project Lead, Performance Monitoring and Reporting, Health Quality Ontario</p>	Toronto Ballroom (Convention Level)
RF1.2	<p>Patterns of Care for Children who are Persistently High Resource Utilizers: Implications for Policy</p> <p>Presented by ASTRID GUTTMANN, Senior Scientist, Institute for Clinical Evaluative Sciences</p>	Toronto Ballroom (Convention Level)
RF1.3	<p>Making Research Results Relevant and Useable: Presenting Complex Data to Non-Research Stakeholders in the Nursing Home Setting</p> <p>Presented by JENNIFER KNOPP-SIHOTA, Assistant Professor, Athabasca University</p>	Toronto Ballroom (Convention Level)
8:45am – 9:45am	<p>Keynote Presentation – Towards a Third Wave of Evidence for Health</p> <p>Presented by TIM EVANS, Director, Health Nutrition & Population, Human Development Network, World Bank</p> <p>Discussant: DANIELLE MARTIN, Vice-President, Medical Affairs and Health System Solutions at Women's College Hospital (WCH), family physician, Family Practice Health Centre at WCH, Assistant Professor, Departments of Family and Community Medicine and Health Policy, Management and Evaluation, University of Toronto</p>	Toronto Ballroom (Convention Level)
9:45am – 11:00am	Poster & Display Viewing	Governor General Suite (2nd Floor)
11:00am – 12:00pm	<p>Sub-Plenary Sessions – Helping to Build Bridges: How can research inform policy?</p> <p>The themes of this session are aligned with the Council of the Federation - Health Care Innovation Working Group and are to highlight research knowledge that would be particularly useful to policy-makers in developing strategies in the Ministry of Health.</p>	
SP1.1	<p>Healthy Aging In The Community With A Particular Emphasis On Care In The Community Rather Than Institutions And Addressing Needs Related To Dementia</p> <p>Moderated by WALTER WODCHIS, Associate Professor, Institute of Health Policy, Management and Evaluation, University of Toronto</p> <p>Presented by SAMIR SINHA, Director of Geriatrics, Mount Sinai Hospital; KEN ROCKWOOD, Geriatrician, Professor, and Director of Geriatric Medicine Research, Faculty of Medicine, Dalhousie University; LYNN BEATTIE, Professor Emeritus, Department of Medicine, Division of Geriatric Medicine, University of British Columbia</p> <p>This session will focus on healthy aging in the community with a particular emphasis on care in the community rather than institutions and addressing needs related to dementia. Presenters will identify key knowledge that would be most important to policy-makers in developing and implementing policies, and identify what kinds of knowledge they are looking for to set policy. What is missing, what can facilitate uptake of research?</p>	Toronto II & III (Convention Level)
SP1.2	<p>Policy Imperatives for Pharmaceutical Coverage and the Role of Pricing</p> <p>Moderated by DAVID HENRY, Professor and senior advisor to the Dean, Dalla Lana School of Public Health, Director, Institute of Health Policy, Management, and Evaluation; JUDY MCPHEE, Executive Director, Pharmaceutical Services, Nova Scotia Department of Health & Wellness</p> <p>Presented by AIDAN HOLLIS, Department of Economics, Professor, University of Calgary; MARC-ANDRÉ GAGNON, Assistant Professor, School of Public Policy and Administration, Carleton University</p> <p>This session will highlight research knowledge that would be particularly useful to policy-makers in developing strategies in the Ministry of Health. The focus of the session will be on a pricing framework that would provide a longer term and consistent approach to generic and brand name pricing and pricing expectations. The presenters of this session will to identify key knowledge that would be most important to policy-makers in developing and implementing policies, as well as determine what kinds of knowledge they are looking for to set policy. What is missing, what can facilitate uptake of research?</p>	Toronto I (Convention Level)

SP1.3	Adoption Of Appropriateness Best Practices Related To The Underuse, Overuse And/Or Misuse Of Medical Tests And Procedures	Jackson (Convention Level)
	Moderated by TOM CLOSSON , Vice Chair, Canadian Foundation for Healthcare Improvement, Board Member of Health Quality Ontario and LifeLabs	
	Presented by WENDY LEVINSON , Professor, University of Toronto Department of Medicine; SACHA BHATIA , MD, Cardiac Imaging Fellow, Massachusetts General Hospital and Harvard Medical School, Incoming Director, Women's College Hospital Institute for Health System Solutions and Virtual Care; RON SAPSFORD , CEO Ontario Medical Association	
	Sponsored by Canadian Institute for Health Information	
	This session will focus on inappropriate overuse of health resources. The session will highlight Choosing Wisely Canada which will be launched nationally on April 2, 2014. Researchers will present approaches to studying inappropriate overuse and specifically the evaluation strategy for Choosing Wisely. A senior government official will discuss the opportunities and challenges associated with policy development to address inappropriate overuse.	
12:00pm – 1:00pm	Networking Lunch	Toronto Ballroom I (Convention Level)
12:00pm – 1:00pm	CAHSPR Annual General Meeting	Toronto Ballroom II (Convention Level)
1:00pm – 2:15pm	CONCURRENT SESSIONS A (Presentations are listed in the language in which they will be presented)	See pages 31 – 36
A1	PANEL Partnerships for healthcare transformation through eHealth innovations	Toronto Ballroom III (Convention Level)
A2	PANEL Driving Clinical Innovation in Alberta Health Services: Strategic Clinical Networks	Tom Thompson (Convention Level)
A3	MENTAL HEALTH	Jackson (Convention Level)
A4	HEALTH ECONOMICS	York (Lobby Level)
A5	PHARMACEUTICAL	Simcoe (Lobby Level)
A6	CHRONIC DISEASE MANAGEMENT	Osgoode (3rd Floor)
A7	PUBLIC HEALTH	Johnston (Convention Level)
2:15pm – 2:30pm	Transition	
2:30pm – 3:45pm	CONCURRENT SESSIONS B (Presentations are listed in the language in which they will be presented)	See pages 36 – 41
B1	PANEL Using National Frameworks for Local Policy Development: A Case Study of Child and Youth Mental Health in the Yukon	Toronto Ballroom III (Convention Level)
B2	PANEL QUALICO-PC in Canada, Australia, and New Zealand: Recruitment, Responses, and Initial Cross Country Comparison with Australia and New Zealand	Toronto Ballroom I (Convention Level)
B3	EQUITY AND INEQUITIES	Jackson (Convention Level)
B4	HEALTH QUALITY AND SAFETY	York (Lobby Level)
B5	COMMUNITY CARE	Simcoe (Lobby Level)
B6	HEALTHCARE LEADERSHIP AND POLICY	Osgoode (3rd Floor)
B7	HEALTH HUMAN RESOURCES	Johnston (Convention Level)
B8	PANEL How Can We Strengthen Researcher-Research User Collaboration to Improve Health Service Planning, Delivery, Evaluation and Improvement?	Tom Thompson (Convention Level)
3:45pm – 4:00pm	Transition	

4:00pm – 4:15pm	Rapid Fire Poster Presentations (Presentations are listed in the language in which they will be presented)	See pages 63 – 67
RF2.1	Leaving Against Medical Advice: Characteristics Associated with Self-Discharge Presented by DEREK LEFEBVRE , Senior Analyst, Canadian Institute for Health Information	Toronto Ballroom (Convention Level)
RF2.2	Establishing a performance measurement framework for primary care in Ontario Presented by BRIAN HUTCHISON , Senior Advisor for Primary Care, Health Quality Ontario	Toronto Ballroom (Convention Level)
RF2.3	Environmental Scan of Patient-Centred Innovations for Persons with Multimorbidity in Quebec and Ontario Presented by BRIDGET L. RYAN , Post-doctoral Fellow, Western University	Toronto Ballroom (Convention Level)
4:15pm – 5:30pm	Keynote Panel Presentation – The Bridge: How Decision-Makers Use Evidence In Health Policy Decisions Moderated by G. ROSS BAKER , Professor, Institute of Health Policy, Management and Evaluation, University of Toronto Presented by MINISTER DOUG GRAHAM , Yukon; MINISTER FRED HORNE , Alberta Sponsored by Canadian Institute for Health Information Health ministers from Alberta and the Yukon Territory will address raising awareness within the health policy and health research community about the past, current and future health policy priorities across Canada.	Toronto Ballroom (Convention Level)
5:30pm – 6:15pm	Networking Reception	Foyer, Toronto Ballroom (Convention Level)



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Canadian Association for Health
Services and Policy Research

L'Association canadienne pour la
recherche sur les services et les
politiques de la santé

Wednesday, May 14, 2014 Conference Day 2

6:15am – 7:30am	CAHSPR on the Move Morning exercise coordinated by the CAHSPR Student Working Group Start your day with a brisk morning run or walk around downtown Toronto. Coffee-fueled, enthusiastic guides will meet you in the hotel lobby, armed with maps of the most scenic routes we could muster. Have your photo taken (and maybe even tweeted) by one of our volunteers! For those who would like to go out on their own at a later time, guide maps will be available at the SWG table and at http://cahspr.ca/en/themegroups/student	Meet in Hotel Lobby
7:00am – 8:30am	CHIPS Theme Group Steering Committee Meeting	Johnston (Convention Level)
7:00am – 8:30am	Breakfast and Hall Foundation Annual General Meeting	Toronto Ballroom (Convention Level)
8:30am – 8:45am	Rapid Fire Poster Presentations (Presentations are listed in the language in which they will be presented)	See pages 63 – 67
	RF3.1 Tracing Patient Centred Care Publications Over the Last 67 Years Presented by PAULA ROWLAND , Assistant Professor, University of Toronto	Toronto Ballroom (Convention Level)
	RF3.2 Politics and policy-making in Canadian cancer drugs: The role of Avastin funding in Ontario in shaping the pan-Canadian Oncology Drug Review Presented by ANSON TANG , Clinical Lecturer, University of Waterloo	Toronto Ballroom (Convention Level)
	RF3.3 Employment Issues among Rural Family Physicians in Canada - 2013 National Physician Survey Results Presented by BILAL KOBEISSI , Research Assistant, College of Family Physicians of Canada	Toronto Ballroom (Convention Level)
8:45am – 9:45am	Emmett Hall Lecture – Telling Stories: The Art Of Making Our Research “Stick” Presented by PATRICIA MARTENS , Professor, Faculty of Medicine, Department of Community Health Sciences, University of Manitoba (2014 Hall Laureate) Sponsored in part by Michael Smith Foundation for Health Research This presentation will explore examples of making the health services and population health research messages stick in people's minds – specifically, decision-makers and the public. How do we get our research into action, which is the essence of knowledge translation? Dr. Martens will speak about some real life examples, some from the Manitoba Centre for Health Policy, of sticky (and non-sticky) research, and start the conversation about making our research part of the Canadian dialogue.	Toronto Ballroom (Convention Level)
9:45am – 11:00am	Poster & Display Viewing	Governor General Suite (2nd Floor)
11:00am – 12:15pm	CONCURRENT SESSIONS C (Presentations are listed in the language in which they will be presented)	See pages 42 – 47
	C1 PANEL PATHS Equity for Children: A Program of Research for Understanding What Works for Children	Toronto Ballroom III (Convention Level)
	C2 PANEL Meet the editors - How to publish about health services and policy research in Canada	Tom Thompson (Convention Level)
	C3 HEALTH INFORMATICS AND E-HEALTH	Jackson (Convention Level)
	C4 MODELS OF CARE	Osgoode (3rd Floor)
	C5 HEALTH QUALITY AND SAFETY	York (Lobby Level)
	C6 CROSS-NATIONAL PERSPECTIVES	Simcoe (Lobby Level)
	C7 EQUITIES AND INEQUITIES	Johnston (Convention Level)
12:15pm – 1:15pm	Networking Lunch	Toronto Ballroom (Convention Level)
1:15pm – 2:15pm	Building Bridges: Networking Hour Build bridges and catch-up with old friends. Make the most of CAHSPR's networking hour and take this opportunity to connect with your fellow participants.	(Convention Level)
2:15pm – 2:30pm	Transition	

2:30pm – 3:45pm	CONCURRENT SESSIONS D (Presentations are listed in the language in which they will be presented)	See pages 47 – 52
D1	PANEL Integrating sex and gender in health services and policy research: Have you considered the possibilities?	Toronto Ballroom III (Convention Level)
D2	PANEL Indigenous values and health systems stewardship, an approach for health systems performance in circumpolar regions	Tom Thompson (Convention Level)
D3	HEALTH POLICY AND POLITICS	Jackson (Convention Level)
D4	MENTAL HEALTH	York (Lobby Level)
D5	HEALTH HUMAN RESOURCES	Simcoe (Lobby Level)
D6	HEALTHCARE LEADERSHIP AND MANAGEMENT	Osgoode (3rd Floor)
D7	RESEARCH METHODS	Johnston (Convention Level)
3:45pm – 4:00pm	Transition	
4:00pm – 4:15pm	Rapid Fire Poster Presentations (Presentations are listed in the language in which they will be presented)	See pages 63 – 67
RF4.1	Exploring Gender Bias in Heart Failure Patients Treated in Specialized Multi-Disciplinary Ambulatory Clinics of Ontario Presented by LUSINE ABRAHAMYAN , Clinical Epidemiologist, Toronto Health Economics and Technology Assessment (THETA) Collaborative, University of Toronto	Toronto Ballroom (Convention Level)
RF4.2	Adverse Drug Reaction-Related Hospitalizations Among Seniors, 2006 to 2011 Presented by JEFF PROULX , Program Lead, Canadian Institute for Health Information	Toronto Ballroom (Convention Level)
RF4.3	Mental illness and target length of stay after elective joint replacement Presented by JENNIFER HENSEL , Research Fellow, Department of Psychiatry, University Health Network; Department of Psychiatry, University of Toronto	Toronto Ballroom (Convention Level)
4:15pm – 5:15pm	Keynote Plenary Panel – Our Community: A Conversation about Future Directions for Health Services and Policy Research in Canada with International Comparison and Commentary Presented by ROBYN TAMBLYN , Scientific Director of CIHR's Institute for Health Services and Policy Research; TERRENCE SULLIVAN , Terrence Sullivan & Associates; JOSEPH SELBY , MD, MPH, Executive Director, Patient-Centered Outcomes Research Institute (PCORI); CHARLES NORMAND , Edward Kennedy Chair in Health Policy and Management, University of Dublin, Trinity College; VASANTHI SRINIVASAN , PhD, Former ADM, Ontario Ministry of Health and Long-Term Care; ADALSTEINN D. BROWN , Director, Institute of Health Policy, Management, and Evaluation, Dalla Lana Chair and Division Head, Public Health Policy, Dalla Lana School of Public Health, University of Toronto & Scientist, Li Ka Shing Knowledge Institute of St. Michael's Hospital Sponsored by Canadian Institutes of Health Research – Institute of Health Services and Policy Research Over the past year, the CIHR Institute of Health Services and Policy Research, provincial health research funding organizations, and many of Canada's health charities have worked together to document and understand the evolution and current state of HSPR assets and resources in Canada. The results of this strategic analysis will inform a priority-setting forum where a pan-Canadian vision, strategy and suite of research priorities for the future success of HSPR will be developed. This plenary session will feature the results of the strategic analysis and priority-setting forum and garner the CAHSPR community's input on the go-forward priorities for HSPR in Canada. This plenary will feature Canadian and international HSPR leaders, a policy leader and a citizen representative who will offer reflections on the proposed vision and priorities and provide insights from their experiences. This session presents an important opportunity for the CAHSPR community to contribute to a forward-looking strategy that will position Canada's HSPR community for success in terms of world-class research and research use.	Toronto Ballroom (Convention Level)
5:30pm	Mental Health Theme Group Networking Activity Tour of the Centre for Social Innovation in Regent Park. Refreshments will be provided. Meet at the Hilton Lobby at 5:30pm and bring your business cards.	Meet in Hotel Lobby
6:00pm – 7:00pm	Students Speed Networking Event Coordinated by the CAHSPR Student Working Group Make a connection, ask important questions and leave a lasting impression – in 7 minutes! Inspired by the exciting experience of speed dating, this event allows students to sign up for one-on-one conversations with some of CAHSPR's superstar experts and leaders. Student sign-up will occur on a first-come-first-serve basis at the SWG table starting Tuesday, May 13. Not sure what to ask the expert? No problem! Tip sheets will be available at the SWG table and on our website for those who have never participated in such an event before. Biographies on the experts and leaders will be available at the SWG table as well as on our website: http://cahspr.ca/en/themegroups/student	Foyer, Toronto Ballroom (Convention Level)
7:30pm – 10:00pm	Student Social Event Coordinated by the CAHSPR Student Working Group Come join us for a relaxing evening of good company and great conversation at the annual CAHSPR-SWG Student Social. Students are encouraged to join us at the Friar and Firkin (only 2 blocks from the conference hotel), where they can eat, chat, and unwind after two jam-packed conference days. Members of the SWG will also be leading a walking group to the venue. Details of this event will be posted at: http://cahspr.ca/en/themegroups/student	Meet in Hotel Lobby

Thursday, May 15, 2014 Conference Day 3

7:00am – 8:30am	Networking Breakfast	Toronto Ballroom (Convention Level)
8:30am – 9:30am	Sub-Plenary Sessions	
SP2.1	<p>How to win friends and influence public policy: Lessons from the front lines</p> <p>Sponsored by Ontario Ministry of Health and Long-Term Care</p> <p>Chaired by ADALSTEINN BROWN, Director, Institute of Health Policy, Management, and Evaluation, Dalla Lana Chair and Division Head, Public Health Policy, Dalla Lana School of Public Health, University of Toronto and Scientist, Li Ka Shing Knowledge Institute of St. Michael's Hospital</p> <p>Presented by TERRENCE SULLIVAN, Terrence Sullivan and Associates; MICHAEL LAW, Assistant Professor, Centre for Health Services and Policy Research, School of Population and Public Health, University of British Columbia; MICHAEL SCHULL, President and CEO, Institute for Clinical Evaluative Sciences; SHARON STRAUS, Director, Knowledge Translation program, Li Ka Shing Knowledge Institute at St. Michael's Hospital and University of Toronto</p> <p>This session will be an interactive discussion of the ways that research can influence policy, with researchers and policy makers sharing their experiences about what works and what doesn't. Panel members will describe a range of experiences, and focus on the key ingredients of success where research has made an impact on the policy process. Panel members will also discuss how to use the media effectively, how to form strategic partnerships to inform government policy, and best practices for knowledge translation and exchange of research findings.</p>	Jackson (Convention Level)
SP2.2	<p>Embedding Quality Into The System Using Evidence</p> <p>Sponsored by Health Quality Ontario</p> <p>Chaired by STEPHEN SAMIS, Vice President, Programs, Canadian Foundation for Healthcare Improvement</p> <p>Presented by ROSS BAKER, Professor, Institute of Health Policy, Management and Evaluation University of Toronto; STACY DAUB, CEO, Toronto Central CCAC; SACHA BHATIA, MD, Cardiac Imaging Fellow, Massachusetts General Hospital and Harvard Medical School, Incoming Director, Women's College Hospital Institute for Health System Solutions and Virtual Care</p> <p>How governments, agencies, academics and providers can work together to improve the quality of health care.</p>	Toronto II & III (Convention Level)
SP2.3	<p>Why it is So Hard to Reform Health Care Policy in Canada</p> <p>Chaired by ROBYN TAMBLYN, Scientific Director, Canadian Institutes of Health Research - Institute of Health Services and Policy Research</p> <p>Presented by JOHN CHURCH, University of Alberta, Political Science; HARVEY LAZAR, University of Victoria and Institute of Intergovernmental Relations, Queen's University; JOHN LAVIS, McMaster University; GREG MARCHILDON, University of Regina</p> <p>This session assesses the nature and extent of health-care policy reform in Canada since the beginning of the 1990s, sets out the factors that account for the mediocre reform record that was achieved, and discusses the prospects for reform going forward.</p>	Toronto I (Convention Level)
9:30am – 10:45am	Poster & Display Viewing	Governor General Suite (2nd Floor)
10:45am – 12:15pm	<p>CONCURRENT SESSIONS E</p> <p>(Presentations are listed in the language in which they will be presented)</p>	See pages 53 – 57
E1	PANEL Challenging Health System Leaders to Align Optimal Scopes of Practice and Innovative Care Models to Enable Health System Transformation in Canada	Toronto Ballroom III (Convention Level)
E2	PANEL The state-of-the art in policy-focused knowledge translation	Tom Thompson (Convention Level)
E3	PANEL Improving palliative care provincially: Policy and research initiatives at four levels	Osgoode (3rd Floor)
E4	RESEARCHER & DECISION MAKER PAIRS - ABORIGINAL HEALTH	Jackson (Convention Level)
E5	RESEARCHER & DECISION MAKER PAIRS 1	York (Lobby Level)
E6	RESEARCHER & DECISION MAKER PAIRS 2	Simcoe (Lobby Level)
E7	HEALTH ECONOMICS	Johnston (Convention Level)

12:15pm – 1:15pm	Networking Lunch & Awards Presentations <ul style="list-style-type: none"> ▪ Harkness Fellowship Award – Presented by ROBIN OSBORN, Vice President and Director, International Program in Health Policy and Practice Innovation, The Commonwealth Fund; STEPHEN SAMIS, Vice-President, Programs, Canadian Foundation for Healthcare Improvement ▪ Rising Star Award – Presented by ROBYN TAMBLYN, Scientific Director, Canadian Institutes of Health Research - Institute of Health Services and Policy Research ▪ Article of the Year – Presented by ROBYN TAMBLYN, Scientific Director, Canadian Institutes of Health Research - Institute of Health Services and Policy Research ▪ Student Poster Awards – Presented by ROBYN TAMBLYN, Scientific Director, Canadian Institutes of Health Research - Institute of Health Services and Policy Research ▪ McNaught Taillon Award – Presented by MARIA MATHEWS, The Justice Emmett Hall Memorial Foundation ▪ Best Health Human Resources Research Poster – Student/Trainee – GILLIAN MULVALE, McMaster University ▪ Best Health Human Resources Research Presentation – Student/Trainee – GILLIAN MULVALE, McMaster University ▪ Best Health Human Resources Research Poster – Non-Student – GILLIAN MULVALE, McMaster University ▪ Best Health Human Resources Research Presentation – Non-Student – GILLIAN MULVALE, McMaster University 	Toronto Ballroom (Convention Level)
1:15pm – 2:30pm	CONCURRENT SESSIONS F (Presentations are listed in the language in which they will be presented)	See pages 58 – 62
F1	PANEL Implementing Accountability in Health Care: Lessons Learned in Canada and the UK	Toronto Ballroom III (Convention Level)
F2	PANEL Solutions in primary health care for high users of health services	Tom Thompson (Convention Level)
F3	PANEL The Bridging of Research and Policy by At Home/Chez Soi (AH/CS): A multi-site trial of Housing First for persons with a mental illness who are homeless	Jackson (Convention Level)
F4	HEALTH QUALITY AND SAFETY 1	York (Lobby Level)
F5	PRIMARY CARE	Simcoe (Lobby Level)
F6	HEALTH QUALITY AND SAFETY 2	Osgoode (3rd Floor)
F7	KNOWLEDGE TRANSLATION AND EXCHANGE	Johnston (Convention Level)
2:30pm – 2:45pm	Transition	
2:45pm – 3:45pm	Keynote Presentation – Award Winning Health Services Researchers Moderated by FRANK MARKEL Executive Director, Canadian Association for Health Services and Policy Research Presented by DENNIS KO , University of Toronto; PAVAL ROSHANOV , McMaster University; JACOB (JAY) UDELL , Institute for Clinical Evaluative Sciences This session will feature award winning published research by this year's <u>Article of the Year</u> awardee: (Dennis Ko , University of Toronto, <i>Prevalence and extent of obstructive coronary artery disease among patients undergoing elective catheterization in New York State and Ontario</i>) and <u>Rising Star Award</u> Winners: (Peter Gill , University of Alberta, <i>Increase in emergency admissions to hospital for children aged under 15 in England, 1999-2010: national database analysis</i> ; Paval Roshanov , McMaster University, <i>Features of effective computerised clinical decision support systems: meta-regression of 162 randomised trials</i> ; Jacob (Jay) Udell , Institute for Clinical Evaluative Sciences, <i>Association between influenza vaccination and cardiovascular outcomes in high-risk patients: a meta-analysis</i>). These researchers will share their ground-breaking work including the policy implications of their research and their experience in working with decision makers for system change.	Toronto Ballroom (Convention Level)
3:45pm – 4:00pm	Closing Remarks and Adjournment	Toronto Ballroom (Convention Level)



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Keynote Speakers



TIMOTHY EVANS is the Director for Health, Nutrition and Population at the World Bank. Dr. Evans has been active in the international health arena for more than 20 years. Before joining the World Bank he was the dean of the James P. Grant School of Public Health of BRAC University in Bangladesh. Previously he served as Assistant Director General at the World Health Organization, heading the Evidence, Information, Research and Policy Clusters, where he oversaw the production of the annual World Health Report. Dr. Evans has been a leader in advancing global health equity and health systems performance throughout his career, notably through his work with the Rockefeller Foundation and the Harvard School of Public Health and with his contributions to the development of innovative partnerships, including the Global Alliance on Vaccines and Immunization, INDEPTH and Health Metrics networks, the Global Health Workforce Alliance and the World Alliance for Patient Safety. Dr. Evans earned his DPhil in agricultural economics at Oxford, and pursued medical and postgraduate studies at McMaster and Harvard Universities.



DR. PATRICIA J. MARTENS is a Professor in the University of Manitoba's Faculty of Medicine and Director of the Manitoba Centre for Health Policy for a decade from 2004 to 2014 - an internationally-acclaimed centre using administrative data to study population health, health and social services and public health. She received the 2005 CIHR KT Award for Regional Impact for The Need To Know Team, a collaboration of RHAs, Manitoba Health and academics. She has spoken at over 400 conferences, and published over 300 articles, reports, book chapters and abstracts. Her research interests include studies on health status (including Metis and First Nation), inequities, healthcare use, mental health, child health, and breastfeeding. Dr. Martens is co-PI in the groundbreaking pan-Canadian CIHR CNODES (Canadian Network for Observational Drug Effect Studies), and is PI of the CIHR Programmatic grant, "PATHS Equity for Children." She was awarded the 2010 Manitoba YM/YWCA Woman of Distinction for Health & Wellness, was designated a Fellow (FILCA) of the International Lactation Consultants' Association, and has been a CIHR New Investigator (2003-2008) and a CIHR/PHAC Applied Public Health Chair (2008-2013). In 2013 she received the R.D. Defries Award (the highest award of the Canadian Public Health Association for outstanding contributions in public health) and became a member of the Royal Society of Canada and a Member of the Order of Canada (CM).



DANIELLE MARTIN is Vice-President, Medical Affairs and Health System Solutions at Women's College Hospital (WCH), a family physician in the Family Practice Health Centre at WCH, and an Assistant Professor in the Departments of Family and Community Medicine and Health Policy, Management and Evaluation at the University of Toronto. Danielle's policy expertise and passion for equity have made her an emerging leader in the debate over the future of Canada's health-care system. In 2006 she helped launch Canadian Doctors for Medicare and chaired the board of CDM until May 2013.



HON. DOUG GRAHAM was most recently elected to the Yukon Legislative Assembly in the general election of October 11, 2011. He was sworn into Cabinet on November 5, 2011. Mr. Graham was first elected to the Yukon Legislative Assembly on November 20, 1978, representing the electoral district of Whitehorse Porter Creek West from 1978 to 1982. He served as Deputy Chair of Committee of the Whole and Chair of the Standing Committee of Rules, Elections and Privileges. He also held Cabinet responsibility for Education, Justice, Consumer and Corporate Affairs, Workers' Compensation Board, Information Resources and Government Services. From 2000 to 2011, Mr. Graham served as a Whitehorse City Councillor. He has been Chair of the City of Whitehorse Public Health and Safety Committee and Vice-Chair of the City Operations Committee. He also served on the Board of the Federation of Canadian Municipalities for four years. Mr. Graham was raised in Yukon, and has made his home in Porter Creek since 1964. He graduated from the Business Administration Program at the B.C. Institute of Technology in 1972. He recently retired after more than 28 years of service at Yukon College. Mr. Graham is a Past President of the Association of Yukon Communities and has been the Chair for Habitat for Humanity Yukon. He has been active as a fastball player, coach and official for many years and has participated as a volunteer and official for Team Yukon at several Arctic Winter Games and for the 2007 Canada Winter Games in Whitehorse. Mr. Graham and his wife Mayvor have been married for more than 40 years and have two children, Richard and Melanie (Davignon), and a grandchild Levi.



HON. FRED HORNE was elected to his second term as a Member of the Legislative Assembly for Edmonton-Rutherford on April 23, 2012. On May 8, 2012, Mr. Horne was appointed as Minister of Health. He had served as Minister of Health and Wellness since October 2011. He also served as a member of the Cabinet Policy Committee on Public Health & Safety and the Treasury Board. He was also a member of the Standing Committee on Health. Previously, Mr. Horne served as Parliamentary Assistant to Health and Wellness. Previous committee involvement includes membership on the Select Special Chief Electoral Officer Search Committee and the Standing Committee on Legislative Offices and chair of the Standing Committee on Health. Prior to serving with the Legislative Assembly of Alberta, Mr. Horne worked as a health policy consultant for over 25 years, serving various government bodies and regional health authorities in addition to the public, private and not-for-profit sectors. Throughout his career Mr. Horne led initiatives to improve access and quality in Canadian public health care and has worked extensively with the Conference Board of Canada, the Alberta government and the Mayo Clinic. Mr. Horne holds a master of business administration degree from Royal Roads University and a postgraduate certification in dispute resolution from York University. An avid volunteer, Mr. Horne has served on numerous boards including Alberta Mental Health Board, Athabasca University, Mediation and Restorative Justice Centre of Edmonton, Canadian Student Debating Federation. Additionally, Mr. Horne is a former debater and coached Team Canada at the World Schools Debating Championships. For his continued contributions to the development of debate and speech programs Mr. Horne received the Queen Elizabeth II Golden Jubilee Medal in 2002. Mr. Horne and his wife, Jennifer, have lived in Edmonton since 1992.



DR. ROBYN TAMBLYN is a Professor in the Department of Medicine and the Department of Epidemiology and Biostatistics at McGill University. She is a James McGill Chair, a Medical Scientist at the McGill University Health Center Research Institute, and the Scientific Director of the Clinical and Health Informatics Research Group at McGill University. Dr Tamblin's ground-breaking research on educational outcomes has elucidated important relationships between health professional training, licensure and practice that have subsequently guided credentialing policies. Her work on prescription drug use, its determinants, and computerized interventions to improve drug safety (MOXXI) have been recognized internationally. She leads a CIHR-funded team to investigate the use of e-health technologies to support integrated care for chronic disease, and co-leads a Canadian Foundation for Innovation Informatics Innovation Laboratory to create advanced technologies to monitor adverse events in populations and create new tools to improve the safety and effectiveness of health care. Her work is published in the Journal of the American Medical Association, the Annals of Internal Medicine, the British Medical Journal, Medical Care, Health Services Research, among others. She has been awarded the CHSRF KT award for her research in improving the use of medication as well as the ACFAS Bombardier award for innovation in the development of a computerized drug management system. In January 2011, she became the Scientific Director of the Institute of Health Services and Policy Research at the Canadian Institutes of Health Research.



DR. TERENCE SULLIVAN serves in a range of governance and advisory roles in health services and policy including work with WHO and the World Bank. He is the independent board chair of the Canadian Agency for Drugs and Technologies in Health (CADTH) and Public Health Ontario and a trustee of the Hospital for Sick Children. From 2001 to March 2011 he worked with Cancer Care Ontario (CCO), the final 7 years as President and CEO during which he led a major restructuring focused on population-based, performance measurement, reporting and quality improvement. From 1993-2001 Terry was the founding President of the Institute for Work & Health (IWH). He has played senior roles in the Ontario Ministries of Health, Cabinet Office and Intergovernmental Affairs. He served as Assistant Deputy Minister, Constitutional Affairs and Federal-Provincial Relations during the last Canadian constitutional negotiations and he served two successive First Ministers of Ontario as Executive Director of the Premier's Council on Health Strategy. A behavioural scientist, Terry is Professor and Senior Fellow in the Institute of Health Policy, Management & Evaluation, the Dalla Lana School of Public Health at the University of Toronto and Adjunct Professor of Oncology at McGill University.



JOSEPH SELBY, M.D., M.P.H., is the first Executive Director of the Patient-Centered Outcomes Research Institute (PCORI). A family physician, clinical epidemiologist and health services researcher, he has dedicated his career to patient care, clinical research and administration. At PCORI, he works to identify and address strategic issues and opportunities for PCORI and to implement and administer the research agenda authorized by the PCORI Board of Governors. Building on the foundational work of the Board, Selby leads the continuing development of PCORI as a research organization, overseeing the implementation of its research agenda, its external communications, and its work to establish effective on-going, two-way engagement channels with each of PCORI's key stakeholder groups, beginning with patients. Selby joined PCORI from Kaiser Permanente, Northern California, where he was a researcher for 27 years, serving as Director of the Division of Research for the last 13 years. In this role, he led a department of more than 50 investigators and 500 research staff working on more than 250 ongoing studies. An accomplished researcher, Selby has authored more than 220 peer-reviewed articles, primarily in the areas of primary care delivery; diabetes mellitus outcomes and quality improvement; colorectal cancer screening strategies; population management for chronic conditions; and quality measurement. Selby was elected to membership in the Institute of Medicine in 2009. A native of Fulton, Missouri, Selby received his medical degree from Northwestern University; his training in family medicine from Contra Costa County Family Medicine Program, Martinez, CA, and his master's in public health from the University of California, Berkeley. He served as a commissioned officer in the Public Health Service with the National Health Services Corp from 1976-1983 and received the Commissioned Officer's Award in 1981. Dr. Selby was appointed PCORI executive director on May 16, 2011.



CHARLES NORMAND is Edward Kennedy Professor of Health Policy and Management at the University of Dublin, Trinity College. He was for thirteen years Professor of Health Economics at the London School of Hygiene & Tropical Medicine, and remains a visiting professor there. He has worked also at the universities in Belfast, York and Stirling. He was a civil servant in Northern Ireland for four years and has worked in hospital management, including a period as chairman of the board at Central Middlesex Hospital and is currently on the boards of St. James's Hospital and Trinity Health Ireland. His BA and DPhil are in economics. Much of his work is on the evaluation of treatments and services, with a particular interest on neonatal technologies, heart disease and the major cancers. His has also worked on finance and delivery of health services and health care human resources. He has a particular interest in the consequences of population ageing on health and social care. He has carried out advisory work and research on health care reform in the new democracies in Central and Eastern Europe and the former Soviet Union, in Bangladesh, Malawi, Tanzania and in South Africa. He has published widely on health economics and financing, is author of two guidebooks on health insurance and of a textbook on health economics. He is a former President of the Association of Schools of Public Health in the European Region and chairs the steering committee of the WHO European Observatory on Health Systems and Policy.



DR. VASANTHI SRINIVASAN is the founding Interim Executive Director of the Ontario Strategy for Patient- Oriented Research (SPOR) SUPPORT Unit. Until December 2013, Vasanthi was the Assistant Deputy Minister of the Health Systems Strategy and Policy Division. She was also the lead for the research program for the Ministry of Health and Long Term Care. She has held several senior management positions at the federal and provincial levels of government. Vasanthi holds a PHD from the University of Ottawa and has led several key policy and research initiatives. She has served at the national and international levels in social policy areas such as health and immigration with a particular focus on seniors, aboriginal peoples and women's issues. During her tenure in the Policy Research Initiative of the Privy Council Office of Canada, she was seconded to the Cabinet Office in the United Kingdom to the Performance and Innovation Unit. While in London, she co-authored a white paper on Immigration and Integration Issues and created the Strategic Futures Group that led horizontal policy development for Whitehall, the Scottish Executive, the Welsh Assembly and Northern Ireland. Vasanthi was awarded the prestigious Head of the Public Service of Canada Award for her work on the Metropolis Project established to conduct policy research on immigration and integration in cities lead by Canada and involving 18 countries. As Assistant Deputy Minister at the Ministry of Health and Long Term Care, Vasanthi was the lead of two teams that won the coveted Amethyst Awards for the Ontario Mental Health and Addiction Strategy and for the work of the Trilateral Committee addressing First Nations and Aboriginal issues.



ADALSTEINN D. BROWN is the Director of the Institute for Health Policy, Management and Evaluation and is also the Dalla Lana Chair in Public Health Policy and the Head of the Division of Public Health Policy at the Dalla Lana School of Public Health, University of Toronto. He is a Scientist in the Li Ka Shing Knowledge Institute at St. Michael's Hospital. Past roles include the Assistant Deputy Minister for Strategy and Policy at the Ontario Ministry of Health and Long-term Care and for Science and Research at the Ontario Ministry of Research and Innovation. He is the past president of CAHSPP. He received his undergraduate degree in government from Harvard University and his doctorate from the University of Oxford, where he was a Rhodes Scholar. He has received several leadership awards including being named one of Canada's "Top 40 Under 40" in recognition for his work on performance measurement in health care. He has held founding roles in consulting, software, and Internet companies and has advised the World Health Organization, banks, software and insurance companies, and health care providers in North America, Europe, and Asia.

Supplementary Sections

Sections supplémentaires

Concurrent Sessions-at-a-Glance | Séances simultanées en un coup d'œil

Tuesday, May 13, 2014 | 1:00pm – 2:15pm **STREAM A** (Guide: pgs. 31 – 36)

Le mardi 13 mai 2014 | 13 h 00 – 14 h 15 **VOLET A** (Guide : pgs. 31 – 36)

A1	PANEL / PRÉSENTATION EN PANEL Partnerships for healthcare transformation through eHealth innovations	Toronto Ballroom III (Convention Level/ Niveau « Convention »)
A2	PANEL / PRÉSENTATION EN PANEL Driving Clinical Innovation in Alberta Health Services: Strategic Clinical Networks	Tom Thompson (Convention Level/ Niveau « Convention »)
A3	MENTAL HEALTH / SANTÉ MENTALE	Jackson (Convention Level/ Niveau « Convention »)
A3.1	The impact of shared care on psychiatric re-hospitalization	
A3.2	Self-reported mood and subsequent healthcare use in older emergency department patients: Results of a multicenter prospective cohort study	
A3.3	Bridging the gap between health and social services for youth and young adult mental health	
A3.4	Telephone coaching increases adherence to depression self-care tools among primary care patients with chronic physical conditions: A randomized trial	
A4	HEALTH ECONOMICS / ÉCONOMIE DE LA SANTÉ	York (Lobby Level/ Réception de l'hôtel)
A4.1	Characterizing Ontario's High-Cost Users (HCU) of health care: the demographic, socio-economic, behavioral and clinical characteristics over time	
A4.2	Measuring the level and determinants of health system efficiency in Canada	
A4.3	Who are the high-cost users? A method for person-centred attribution of health care spending	
A4.4	Predicting Patients with High Risk of Becoming High Cost Healthcare Users	
A5	PHARMACEUTICAL / PHARMACEUTIQUES	Simcoe (Lobby Level/ Réception de l'hôtel)
A5.1	Potential savings from universal public pharmacare in Canada	
A5.2	Expenditure Trends and Cost Drivers of Biologics in Public Drug Plans in Canada	
A5.3	Public Drug Plan Expenditures, 2012/13	
A5.4	The Impact of and audit and feedback intervention to reduce potentially inappropriate prescriptions: Evaluating the IMPRxOVE program in Manitoba	
A6	CHRONIC DISEASE MANAGEMENT / MALADIES CHRONIQUE	Osgoode (3rd Floor/3 ^e étage)
A6.1	Optimizing Chronic Disease Management in the Community (Outpatient) Setting: an evidence synthesis	
A6.2	Transitions of Care--The hospital discharge experience of patients with complex chronic disease	
A6.3	Describing patterns of healthcare use throughout British Columbia	
A6.4	Ontario Renal Network Mentorship Pilot Program: the Mentee Perspective	
A7	PUBLIC HEALTH / SANTÉ PUBLIQUE	Johnston (Convention Level/ Niveau « Convention »)
A7.1	Risk factors for alcohol consumption among pre-adolescents in Saskatoon, Saskatchewan	
A7.2	Uptake of the Ontario Pharmacy Smoking Cessation Program, 2011-2013	
A7.3	Evidence of the early health benefits of publicly funded, school-based human papillomavirus (HPV) vaccination in Canada	
A7.4	What's the real burden of formula feeding on the healthcare system--A Manitoba population-based study	
Tuesday, May 13, 2014 2:30pm – 3:45pm STREAM B (Guide: pgs. 36 – 41)		
Le mardi 13 mai 2014 14 h 30 – 15 h 45 VOLET B (Guide : pgs. 36 – 41)		
B1	PANEL / PRÉSENTATION EN PANEL Using National Frameworks for Local Policy Development: A Case Study of Child and Youth Mental Health in the Yukon	Toronto Ballroom III (Convention Level/ Niveau « Convention »)
B2	PANEL / PRÉSENTATION EN PANEL QUALICO-PC in Canada, Australia, and New Zealand: Recruitment, Responses, and Initial Cross Country Comparison with Australia and New Zealand	Toronto Ballroom I (Convention Level/ Niveau « Convention »)
B3	EQUITY AND INEQUITIES / ÉQUITÉ ET FACTEURS D'INÉGALITÉ	Jackson (Convention Level/ Niveau « Convention »)
B3.1	Strategies for Improved French Language Health Services; Perspectives from Family Physicians in Northeastern Ontario	
B3.2	Social Housing and Health in Manitoba: A first look	
B3.3	Addressing income security within primary health care	
B4	HEALTH QUALITY AND SAFETY / QUALITÉ ET SÉCURITÉ DES SOINS DE SANTÉ	York (Lobby Level/ Réception de l'hôtel)
B4.1	Asking Children with Cerebral Palsy about Pain: An Evidence Informed Approach to Establishing a Chronic Pain Assessment Toolbox	
B4.2	Implementing a quiet time intervention in a maternity ward: barriers, benefits and patient experience	
B4.3	Treatment of Preventable Dental Cavities in Preschoolers	
B4.4	Trends in Glucocorticoid-Induced Osteoporosis Management Among Seniors in Ontario, 1997-2011	
B5	COMMUNITY CARE / SOINS COMMUNAUTAIRES	Simcoe (Lobby Level/ Réception de l'hôtel)
B5.1	User-based and Government Operational Costs of Supportive Housing Versus Nursing Home Use: What's the Balance?	
B5.2	Understanding the Characteristics and Health Care Utilization Patterns of Palliative and End-of-Life Patients in Ontario Using Administrative Datasets	
B5.3	Primary care continuity among frail older adults	
B5.4	Examining Variation in Access to Post-Acute Home Care Services	
B6	HEALTHCARE LEADERSHIP AND POLICY / LEADERSHIP ET POLITIQUES EN MATIÈRE DE SOINS DE SANTÉ	Osgoode (3rd Floor/3 ^e étage)
B6.1	Researching Leadership Gaps in Decentralized and Distributed Health Systems	
B6.2	Comparing the Canadian Health System Internationally	
B6.3	Academic Entrepreneurship in the Health Sciences: An Institutional Work Approach	
B6.4	Territorialité, communautés et santé : Défis liés à la reconfiguration des établissements de santé au Québec	
B7	HEALTH HUMAN RESOURCES / RESSOURCES HUMAINES EN SANTÉ	Johnston (Convention Level/ Niveau « Convention »)
B7.1	A longitudinal analysis of nurse retention in Ontario (2003-2010): Recommendation for policy and practice	
B7.2	Knowledge Synthesis of Internationally Educated Health Professionals in Canada: Gap Analysis and Recommendations for Research	
B7.3	Towards a more nuanced understanding of health profession organizations as interest groups in health policymaking	
B7.4	The Enhancement of the Scopes of Pharmacists' Practice: A Comparative Analysis of the Regulatory Frameworks in Saskatchewan and Ontario	
B8	PANEL / PRÉSENTATION EN PANEL How Can We Strengthen Researcher-Research User Collaboration to Improve Health Service Planning, Delivery, Evaluation and Improvement?	Tom Thompson (Convention Level/ Niveau « Convention »)

C1	PANEL / PRÉSENTATION EN PANEL PATHS Equity for Children: A Program of Research for Understanding What Works for Children	Toronto Ballroom III (Convention Level/ Niveau « Convention »)
C2	PANEL / PRÉSENTATION EN PANEL Meet the editors - How to publish about health services and policy research in Canada	Tom Thompson (Convention Level/ Niveau « Convention »)
C3	HEALTH INFORMATICS AND E-HEALTH/ INFORMATIQUE EN SANTÉ / CYBER SANTÉ	Jackson (Convention Level/ Niveau « Convention »)
C3.1	Formation of disease registries in a large Family Health Team (FHT): a Canadian Primary Care Sentinel Surveillance Network (CPCSSN) project	
C3.2	Impact of patient's online access to laboratory results in British Columbia: primary care utilization and patient self-management	
C3.3	Evaluation of the Quebec e-prescribing Health Record medication functions - potential benefits and barriers to its realization according to early adopters	
C3.4	Impact of using electronic records in family physician/general practitioner practices	
C4	MODELS OF CARE / MODÈLES DE SOINS	Osgoode (3rd Floor/3 ^e étage)
C4.1	Facilitators and Barriers to Provincial Model of Care Development and Implementation	
C4.2	Saving Fee For Service : The feasibility of a proposed physician group remuneration model	
C4.3	Patient Flow Initiatives: How We Get them Right - and Why We Get them Wrong	
C5	HEALTH QUALITY AND SAFETY / QUALITÉ ET SÉCURITÉ DES SOINS DE SANTÉ	York (Lobby Level/ Réception de l'hôtel)
C5.1	Does improvement in emergency department length of stay lead to improvements in quality of care?	
C5.2	A Systematic Review of the Clinical- and Cost-effectiveness of Interventions for Frequent Users of the Emergency Department	
C5.3	Weekend Admission and In-Hospital Mortality: Shall Patients Avoid Hospitals on Weekends?	
C5.4	Using Geoinformatics to Evaluate Access to Emergency Stroke Care in Ontario	
C6	CROSS-NATIONAL PERSPECTIVES / POINTS DE VUE TRANSNATIONAUX	Simcoe (Lobby Level/ Réception de l'hôtel)
C6.1	A cross national examination of age at retirement and health	
C6.2	Bending the Cost Curve in the Country of the Red Queen	
C6.3	The Increasing Inefficiency of Private Health Insurance in Canada	
C6.4	Too Few, Too Weak: Conflict of Interest Policies at Canadian Medical Schools	
C7	EQUITIES AND INEQUITIES / ÉQUITÉ ET FACTEURS D'INÉGALITÉ	Johnston (Convention Level/ Niveau « Convention »)
C7.1	Income-related inequalities for injury hospitalizations in Canada: trends and policy approaches	
C7.2	An Organizational-level Intervention to Address Health Inequities in Primary Health Care Clinics	
C7.3	Socio-economic status gradients among high-cost users in Ontario	
C7.4	Lack of government-funded optometric services is associated with reduced utilization of eye care providers and increased utilization of family doctors	
Wednesday, May 14, 2014 2:30pm – 3:45pm STREAM D (Guide: pgs. 47 – 52)		
Le mercredi 14 mai 2014 14 h 30 – 15 h 45 VOLET D (Guide : pgs. 47 – 52)		
D1	PANEL / PRÉSENTATION EN PANEL Integrating sex and gender in health services and policy research: Have you considered the possibilities?	Toronto Ballroom III (Convention Level/ Niveau « Convention »)
D2	PANEL / PRÉSENTATION EN PANEL Indigenous values and health systems stewardship, an approach for health systems performance in circumpolar regions	Tom Thompson (Convention Level/ Niveau « Convention »)
D3	HEALTH POLICY AND POLITICS / LES POLITIQUES ET LA POLITIQUE DE LA SANTÉ	Jackson (Convention Level/ Niveau « Convention »)
D3.1	How does the public want to be involved in health care and health research policy?	
D3.2	What supports do health system organizations have in place to facilitate evidence-informed decision-making? A qualitative study	
D3.3	Reconciling the twin goals of health and wealth? A role for health services and policy research in Canadian science and technology policy	
D3.4	Canada's First Pan-Canadian Hospital Experience Survey: A Review of Pilot Results	
D4	MENTAL HEALTH / SANTÉ MENTALE	York (Lobby Level/ Réception de l'hôtel)
D4.1	Fertility rate trends among adolescent girls with major mental illness: a population-based study	
D4.2	Utilization of health and mental health services in the year prior to suicide among Aboriginal people in Labrador	
D4.3	Similarities and Differences in Philosophies of Care between Child and Adult Mental Health Services: A Systematic Review	
D5	HEALTH HUMAN RESOURCES / RESSOURCES HUMAINES EN SANTÉ	Simcoe (Lobby Level/ Réception de l'hôtel)
D5.1	Could primary care NPs turn out to be a disruptive innovation?	
D5.2	Nurse Practitioner Productivity and National Comparison of Nurse Practitioner Salaries in Primary Health Care	
D5.3	The impact of an economic downturn on employment of nurses: Does policy play a role?	
D5.4	Best Elder Care and Acutely Admitted Older Adults: Mapping the Geriatric Educational Needs of Practicing Nurses in Ontario	
D6	HEALTHCARE LEADERSHIP AND MANAGEMENT / LEADERSHIP ET GESTION DES SOINS DE SANTÉ	Osgoode (3rd Floor/3 ^e étage)
D6.1	Managing the Social Environment: What Matters to First Line Managers	
D6.2	Control, appropriateness and performance: A qualitative study of Ontario health system leaders' views on the promises of accountability	
D6.3	Analyse de l'apprentissage du rôle de directeur général et de sont entrée en fonction au sein d'une organisation de santé québécoise	
D7	RESEARCH METHODS / MÉTHODES DE RECHERCHE	Johnston (Convention Level/ Niveau « Convention »)
D7.1	Estimating Completeness of Administrative Health Databases for Ascertain Chronic Disease Cases: A Numeric Example with Parkinson's Disease	
D7.2	Assessing the validity of diagnostic codes in a cohort of diabetics admitted to hospital in Quebec between 2000 and 2011	
D7.3	The importance of Methodology in Reporting Performance Indicators	
D7.4	A novel method of adverse event detection can accurately identify venous thromboembolism (VTE) events from electronic health record data	

Thursday, May 15, 2014 | 10:45am – 12:15pm **STREAM E (Guide: pgs. 53 – 57)**

Le jeudi 15 mai 2014 | 10 h 45 – 11 h 15 **VOLET E (Guide : pgs. 53 – 57)**

E1	PANEL / PRÉSENTATION EN PANEL Challenging Health System Leaders to Align Optimal Scopes of Practice and Innovative Care Models to Enable Health System Transformation in Canada	Toronto Ballroom III (Convention Level/ Niveau « Convention »)
E2	PANEL/ PRÉSENTATION EN PANEL The state-of-the art in policy-focused knowledge translation	Tom Thompson (Convention Level/ Niveau « Convention »)
E3	PANEL / PRÉSENTATION EN PANEL Improving palliative care provincially: Policy and research initiatives at four levels	Osgoode (3rd Floor/3 ^e étage)
E4	RESEARCHER & DECISION MAKER PAIRS - ABORIGINAL HEALTH / TANDEMS CHERCHEUR-DÉCIDEUR - SANTÉ AUTOCHTONE	Jackson (Convention Level/ Niveau « Convention »)
E4.1	Arthritis prevalence and health services use in the Métis population of Ontario	
E4.2	Walking the Prevention Circle: Bearing Witness to an Indigenous Process for Knowledge Sharing	
E4.3	National Alcohol Policy Guidelines for First Nations - Clash of Cultures or Policy with Potential?	
E4.4	Negotiating barriers, navigating the maze: First Nation peoples' experience of medical relocation	
E5	RESEARCHER & DECISION MAKER PAIRS 1 / TANDEMS CHERCHEUR-DÉCIDEUR 1	York (Lobby Level/ Réception de l'hôtel)
E5.1	Introducing patient-based funding into Ontario Hospitals: A complex task faced by leaders	
E5.2	A Collaboration to support high quality early psychosis intervention in Ontario	
E5.3	Examining factors for specialist physician under-unemployment in Canada	
E5.4	The impact of payment methods on professional equity of physicians	
E6	RESEARCHER & DECISION MAKER PAIRS 2 / TANDEMS CHERCHEUR-DÉCIDEUR 2	Simcoe (Lobby Level/ Réception de l'hôtel)
E6.1	Creating a National Strategy for Clinical Guidance Development and Dissemination for Influenza Pandemic	
E6.2	The Impact of Telemedicine Interventions for Individuals with Heart Failure(HF): A Network Meta-Analysis.	
E6.3	Evidence that newborn weight curves should be customized for Canada's ethnic groups	
E6.4	Using Real-Time Measurement to Improve the Patient Experience for Cancer Patients in Ontario	
E7	HEALTH ECONOMICS / ÉCONOMIE DE LA SANTÉ	Johnston (Convention Level/ Niveau « Convention »)
E7.1	Cost-effectiveness analysis of insured eye care services by optometrists in Prince Edwards Island (PEI): an example of diabetic	
E7.2	New genomic technologies: clinical utility and resource planning	
E7.3	Cost-Utility Analysis of Automated External Defibrillators in Office Settings	
E7.4	The Cost Effectiveness of Metered-Dose Inhalers with Spacers versus Wet Nebulization for Salbutamol Inhalation	

Thursday, May 15, 2014 | 1:15pm – 2:30pm **STREAM F (Guide: pgs. 58 – 62)**

Le jeudi 15 mai 2014 | 13 h 15 – 14 h 30 **VOLET F (Guide : pgs. 58 – 62)**

F1	PANEL / PRÉSENTATION EN PANEL Implementing Accountability in Health Care: Lessons Learned in Canada and the UK	Toronto Ballroom III (Convention Level/ Niveau « Convention »)
F2	PANEL / PRÉSENTATION EN PANEL Solutions in primary health care for high users of health services	Tom Thompson (Convention Level/ Niveau « Convention »)
F3	PANEL / PRÉSENTATION EN PANEL The Bridging of Research and Policy by At Home/Chez Soi (AH/CS): A multi-site trial of Housing First for persons with a mental illness who are homeless	Jackson (Convention Level/ Niveau « Convention »)
F4	HEALTH QUALITY AND SAFETY 1 / QUALITÉ ET SÉCURITÉ DES SOINS DE SANTÉ 1	York (Lobby Level/ Réception de l'hôtel)
F4.1	The comorbidity pattern and the quality of diabetes care in Ontario	
F4.2	Assessment of evidence gaps in glucocorticoid-induced osteoporosis: a systematic review	
F4.3	Effectiveness of policies to improve diabetes care and outcomes: the case of British Columbia and Alberta	
F4.4	Managing the Seams: Care Transitions for Older Hip Fracture Patients	
F5	PRIMARY CARE / GESTION DES SOINS DE PREMIÈRE LIGNE	Simcoe (Lobby Level/ Réception de l'hôtel)
F5.1	Primary Healthcare Renewal: No measurable short term gain	
F5.2	The Development of a Practice-level Primary Care Patient Experience Survey	
F5.3	Describing the predictive factors of effects of an interdisciplinary intervention for people with chronic conditions in primary healthcare	
F5.4	Structures and Processes of Teams Involving Nurse Practitioners and Family Physicians in Primary Health Care in Nova Scotia	
F6	HEALTH QUALITY AND SAFETY 2 / QUALITÉ ET SÉCURITÉ DES SOINS DE SANTÉ 2	Osgoode (3rd Floor/3 ^e étage)
F6.1	Choice of Bearing Surface for Total Hip Replacement Affects Need for Repeat Surgery: a Canadian Perspective	
F6.2	The value of personalizing medicine: Medical oncologists' views on gene expression profiling in breast cancer treatment	
F6.3	How long do people with osteoarthritis self-manage before seeking physician care? Findings from the survey on living with chronic diseases in Canada	
F6.4	Program Planning for Weight Management in Primary Care	
F7	KNOWLEDGE TRANSLATION AND EXCHANGE / APPLICATION ET ÉCHANGE DES CONNAISSANCES	Johnston (Convention Level/ Niveau « Convention »)
F7.1	Developing and Refining the Methods for a One-Stop Shop for Research Evidence about Health Systems	
F7.2	A framework for supporting the use of informal knowledge in public health policymaking	
F7.3	Translating Research into Care (TRIC): Improving Health Care Through Innovative Research Collaborations Between Scientists and Administrators	
F7.4	A scoping review of appropriateness of care research in Canada from a health system perspective	

S Student Project / Projet d'étudiant **RF** Rapid Fire Presentation / Présentation éclair d'affiches

Presentations are listed in the language in which they will be presented / Les exposés seront inscrits au programme dans la langue de leur presentation

GOVERNOR GENERAL SUITE (2 ^e ÉTAGE)		
BOARD #	NOTES	PRESENTATION
46	S	A Comparative Analysis of Long-Term Care Policies and Placements Shannon Reynolds, Alumni, University of Toronto
37		A Preliminary Model for Knowledge Management in Healthcare Organizations Anita Kothari, Western University
27	S	A randomized trial of pharmacist prescribing for blood pressure management: the Alberta clinical trial in optimizing hypertension (RxACTION) Sherilyn Houle, Assistant Professor, University of Waterloo
26	S	A systematic review of cost-of-illness studies for juvenile idiopathic arthritis Mary-Ellen Hogan, PhD student, University of Toronto
10		A three-dimensional approach to policy recommendation: obstetrical care in Ontario for low-risk births Naushaba Degani, Manager, Research Methods, Health Quality Ontario
31	S	Adoption of New Innovations in Acute Care Hospitals Jennifer Innis, MA, NP, University of Toronto
20	S	Best Practice Guidelines and evidence-based care: where are the Personal Support Workers (PSWs)? Justine Giosa, Research Associate, Saint Elizabeth
45		Can Recent Health Service Use Predict Postoperative Complications in Seniors Undergoing Colon Cancer Surgery? Aliya Ramjaun, Research Associate, Geriatrics Research Program, Mount Sinai Hospital
2	S	Child to Adult Transitions in Mental Health Care: Mind the Gap! Neil Barr, PhD candidate, McMaster University
22	S	Childhood Cancer Survivors Lost to Follow-Up: Canadian Recall Initiatives Haroon Hasan, BC Cancer Agency
6		Do community-based mental health crisis services reduce the burden of psychiatric presentations to emergency departments? Diana Clarke, Associate Professor and Associate Dean, University of Manitoba, Faculty of Nursing
18		Does Team-Based Primary Care Achieve its Prevention Goals? Screening in Quebec's Family Medicine Groups Julie Fiset-Laniel, Research assistant, Direction de santé publique de l'ASSS de Montréal / Université McGill
43	S	Effects of Housing First on employment and income of homeless individuals: results of a randomized trial Daniel Poremski, Student, McGill University
39		Enabling the Participation of Marginalized Populations through Community Development: A Case Study Analysis of Community Participation in Ontario, Canada Stephanie Montesanti, Postdoctoral Scholar, University of Calgary
3		Entitled Facts and Gaps in the Literature on IMGs: Mapping the Results from CHHRN Knowledge Synthesis & the IMG Database Ivy Bourgeault, University of Ottawa
48	RF	Environmental Scan of Patient-Centred Innovations for Persons with Multimorbidity in Quebec and Ontario Bridget L. Ryan, Post-doctoral Fellow, Western University
30	RF	Establishing a performance measurement framework for primary care in Ontario Brian Hutchison, Senior Advisor for Primary Care, Health Quality Ontario
9		Evaluating the feasibility of collecting patient-reported outcomes for elective surgical care in a large Canadian health authority: Experience from the field Trafford Crump, Post-Doctoral Fellow, University of British Columbia
5		Examination of Disparity in Access to Mental Health Services Among People Living with Human Immunodeficiency Virus (HIV) and Co-morbid Depression in Ontario Stephanie K.Y. Choi, University of Toronto
15	S	Factors Facilitating and Impeding Effectiveness of Interdisciplinary Primary Health Care Teams: A Systematic review of Canadian and international literature Mark Embrett, PhD Candidate, McMaster University
47	S	Frontline staff and senior leader perceptions of patient safety walkrounds Leahora Rotteau, Doctoral Student, University of Toronto
49	S	Hospital Readmissions among Homeless Patients in Toronto Dima Saab, MSc candidate, University of Toronto (Institute for Health Policy, Management and Evaluation) and St. Michael's Hospital (Centre for Research on Inner City Health)
42	S	Identification of structural components of primary care practices associated with lower hospital utilization Jocelyn Pang, Master's Student, University of Toronto, Institute of Health Policy, Management and Evaluation
32	S	Impact of Health Literacy on Chronic Disease Management: A Literature Review Jennifer Innis, MA, NP, University of Toronto
52		Indicators of pharmaceutical sector performance from the 2013 Canadian Rx Atlas Kate Smolina, Post-Doctoral Fellow, Centre for Health Services and Policy Research (UBC)

38	RF	Leaving Against Medical Advice: Characteristics Associated with Self-Discharge Derek Lefebvre, Senior Analyst, Canadian Institute for Health Information
14		Lessons from the Field: Formalized Resource Allocation in a Healthcare Institution with a Pediatric Tertiary Care Mandate Laura R. Dowling, Research Assistant, Strategy & Organizational Performance, IWK Health Centre
35	RF	Making Research Results Relevant and Useable: Presenting Complex Data to Non-Research Stakeholders in the Nursing Home Setting Jennifer Knopp-Sihota, Assistant Professor, Athabasca University
54	S	Measuring Inequity in the Canadian Health System: The Sensitivity of Results to Alternative Assumptions Regarding the Degree of Aversion to Inequality Marjan Walli-Attaei, PhD Student, McMaster University
8		New comparable CIHI indicators on sepsis, in-hospital infections and surgical site infections Chantal Couris, Manager, Indicator Research and Development, Canadian Institute for Health Information
12		Partnering for a Common Quality Agenda (CQA) Gail Dobell, Director, Research Methods and Evaluation, Health Quality Ontario
29		Patients' reasons for choosing the emergency department instead of the family physician for low acuity complaints over Christmas holidays Michelle Howard, Assistant Professor, McMaster University
21	RF	Patterns of Care for Children who are Persistently High Resource Utilizers: Implications for Policy Astrid Guttmann, Senior Scientist, ICES
53	S	Policy entrepreneurship - is there room for public health professionals to speak up against anti-vaccination movements in cyberspace? Melodie (Yun-Ju) Song, PhD Student, McMaster University
41		Prevalence and Control of Diabetes Mellitus in Nova Scotia from Primary Care EMR Data: The Canadian Primary Care Sentinel Surveillance Network Nandini Natarajan, MD, CCFP, Department of Family Medicine, Dalhousie University
1	S	Projet Clinique du Ministère de la Santé et des Services sociaux du Québec - État de la situation 10 ans après la conception Abdullah Afzal, Candidat Maîtrise Gestion de Projet (UQO) et Chargé de projet et de programme (Agence Parc Canada), Université du Québec en Outaouais
44		Risk Factors of Adverse Drug Reaction-Related Hospitalizations Among Seniors, 2006 to 2011 Jeff Proulx, Program Lead, CIHI
4		Service use of youth with concurrent disorders Amy Cheung, Associate Professor, University of Toronto
55	S	The association between diabetes and risk of bleeding for patients with chronic kidney disease initiating warfarin therapy James Wick, MSc. Student, University of Calgary
33	S	The challenges South Asian immigrants face in accessing the appropriate health care opportunities in the Greater Toronto Area (GTA) S. M. Tariqul Islam, PhD Candidate, Laurentian University
16	S	The Cost-Effectiveness of Primary Screening for Chronic Kidney Disease: A Systematic Review Thomas Ferguson, Graduate Student, University of Manitoba, Department of Community Health Sciences
7		The Determinants of Home Death in an End-of-Life or Palliative Care Population Vania Costa, Clinical Epidemiologist, Health Quality Ontario
17	S	The Diagnostic Accuracy of the Tuberculin Skin Test, QuantiFERON-TB Gold, and T-SPOT.TB in Determining Latent Tuberculosis Infection in Hemodialysis Patients Thomas Ferguson, Graduate Student, University of Manitoba, Department of Community Health Sciences
51	S	The effect of publicly funded, school-based human papillomavirus (HPV) vaccination on clinical indicators of sexual behaviour among adolescent girls Leah Smith, McGill University
28	S	The impact of Nurse Practitioner-Led Group Medical Visits for Patients with Chronic Conditions in Primary Care Laura Housden, University of British Columbia
36	RF	The Journey towards Benchmarking in Long-Term Care (LTC) Public Reporting Bernadee Koh-Bilodeau, Project Lead, Performance Monitoring and Reporting, Health Quality Ontario
13		The use of volunteers, technology, and interprofessional team to keep older adults healthy at home: Initial findings from the TAPESTRY Pilot Study Lisa Dolovich, Research Director, McMaster University
34	S	Time Series Methods Applied in Drug Utilization Research: A Systematic Review Racquel Jandoc, MSc Student, Leslie Dan Faculty of Pharmacy, University of Toronto
40	S	Translation and pilot testing of the Spanish Version of the Cardiac Rehabilitation Barriers Scale (CRBS) Nickan Motamedi, B.Sc. Kinesiology & Health Science 2015 Candidate, York University
24	S	Using interprofessional collaboration to empower patients within community based mental health settings May Helfawi, Masters Candidate, Health Sciences, University of Ontario Institute of Technology
25		Using stakeholder-informed research to influence system change: Findings from a national initiative to enhance cross-sectoral collaboration and improve pathways to care for youth Joanna Henderson, Clinician Scientist, Centre for Addiction and Mental Health
50	S	What we want versus what we expect: examining variations in guideline-consistent dementia care, a population-based study Saskia Sivanathan, Doctoral Candidate, UBC Centre for Health Services & Policy Research
11		What's 'Emergency' Got to Do with It? Reconsidering and Redefining the Role of Emergency Medical Services in the Health Care System Deirdre DeJean, Postdoctoral Fellow, McMaster University

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GOVERNOR GENERAL SUITE (2 ^e ÉTAGE)		
BOARD #	NOTES	PRESENTATION
39	S	A picture of magnetic resonance imaging appropriateness in Canada: a literature review Juan-Nicolás Peña-Sánchez, PhD Candidate, University of Saskatchewan
40	RF	Adverse Drug Reaction-Related Hospitalizations Among Seniors, 2006 to 2011 Jeff Proulx, Program Lead, CIHI
24	S	Adverse Events Associated With The Use of Intensity Modulated Radiation Therapy in Breast Cancer Patients Undergoing Adjuvant Radiation Therapy: A Systematic Review and Meta-Analysis Katherine Jensen, MSc Candidate, University of Calgary
10	S	Approaches to Accountability: The Role of Ontario Laboratory Accreditation Lavern Bourne, MHSc, MLT, UOIT
43		Attributable health care costs of diabetes in Ontario, Canada Laura Rosella, Scientist, Public Health Ontario
28		Blood Glucose Test Strips: Utilization and Economic Implications of Restrictions in Use in British Columbia Jillian Kratzer, Research Coordinator, UBC Centre for Health Services and Policy Research
41		Capacity Building in Primary Care: Evaluation of a Low Back Pain Education Program Jess Rogers, Centre for Effective Practice
42		Clinical characteristics and preventable acute care spending among a high cost inpatient population Paul Ronksley, PhD, Postdoctoral Fellow, Ottawa Hospital Research Institute
33	S	Cost-Effectiveness of a Nurse Practitioner-Family Physician Model of Care in a Nursing Home Karen MacDonald, MPH, University of Calgary
16		Current computerized prescriber order entries (CPOEs) do facilitate medication errors Tewodros Eguale, Postdoctoral fellow, Harvard/ McGill
49		Determinants of Community Pharmacist's Quality of Care: A Cohort Study Using Pharmacist's Billing Data Nancy Winslade, Assistant Professor, McGill University
31	S	Does socioeconomic status moderate the effect of increasing chronic disease burden on three-year survival in a population-based cohort? Natasha Lane, MD/PhD Student, University of Toronto
27	RF	Employment Issues among Rural Family Physicians in Canada - 2013 National Physician Survey Results Bilal Kobeissi, Research Assistant, College of Family Physicians of Canada
5	S	Evaluating the effectiveness of cardiovascular disease prevention and management (CVDPM) approaches: A comparison of two Saskatchewan health regions Caroline Beck, MPP Candidate, Johnson-Shoyama Graduate School of Public Policy, University of Regina
15	S	Evaluation of Medical Savings Account as an Alternative Healthcare Financing Option, Using a Microsimulation Tool Sahba Eftekhary, PhD Student, University of Toronto
1	RF	Exploring Gender Bias in Heart Failure Patients Treated in Specialized Multi-Disciplinary Ambulatory Clinics of Ontario Lusine Abrahamyan, Clinical Epidemiologist, Toronto Health Economics and Technology Assessment (THETA) Collaborative, University of Toronto
13		Funding hospital volume and effect on readmissions: Experience from the trenches Trafford Crump, UBC Centre for Health Services and Policy Research
48	S	Harmonization of Health Technology Assessment and Regulatory Approval: A Bridge Over the Chasm Bernice Tsoi, PhD candidate, PATH Research Institute/ McMaster University
2	S	Health Systems Guidance Appraisal - Better Guidance for Better Health Systems Denis Ako-Arrey, PhD Candidate, McMaster University
36	S	Healthcare costs attributable to a secondary diagnosis of Clostridium difficile: A retrospective cohort study using Ontario health administrative data Natasha Nanwa, Graduate Student, University of Toronto
45		High risk screening of seniors in Quebec emergency departments Deniz Sahin, Project Coordinator, St. Mary's Research Centre, McGill University
3	S	How is diabetes care working for First Nations? Evaluating community wellness programs and informing prevention planning Dhiwya Attawar, PhD Student, University of Manitoba
19		Implementing Frontline Services for Addictions in Quebec: What are the challenges? Kathryn Gill, Associate Professor; Research Director, Department of Psychiatry, McGill University; Addictions Unit, McGill University Health Centre
25		Lack of provincially funded general eye exams affects vision health outcomes Yaping Jin, MD, PhD, University of Toronto
7		Le collectif de recherche : un outil de transfert des connaissances en temps opportun Roxane Borgès Da Silva, Professeure, Université de Montréal
21		Level of disability, multi-morbidity and breast cancer screening: Does severity matter? Sara Guilcher, Post Doctoral Fellow, St. Michael's Hospital, HSPRN

4		Making Sense of eHealth Investments and their Policy Implications in Canada Jesdeep Bassi, Research analyst, University of Victoria
14	S	Mental health service use by recent immigrants and by long term residents in Ontario, Canada Anna Durbin, MPH, University of Toronto
22	RF	Mental illness and target length of stay after elective joint replacement Jennifer Hensel, Research Fellow, Department of Psychiatry, University Health Network; Department of Psychiatry, University of Toronto
12	S	Nutrition care needs of Alzheimer disease and non-Alzheimer disease dementia patients Allison Cammer, University of Saskatchewan
17	S	Organizational Factors in Integrated Healthcare Delivery Models: A Review of Measurement Tools Jenna Evans, Post-Doctoral Fellow, Institute of Health Policy, Management & Evaluation
30		Overweight and Obesity: A History of Diet- Results of a Study with Children and Adolescents from a Psychosocial Perspective in Germany Dörthe Krömker, McGill University
9		Patient centered care: More than feel-good care Fatima Bouharaoui, centre de recherche de l'hôpital St Mary
35	S	Perceived Facilitators and Barriers to Self-Management in Individuals with Traumatic Spinal Cord Injury: A Qualitative Descriptive Study Sarah Munce, PhD Candidate, University of Toronto
26		Perspectives on Patient Engagement Cynthia Kendell, Research Associate, Cancer Outcomes Research Program, Capital Health/Dalhousie
34	S	Planning for Health Workforces and Health Care Systems Based on Population Health Needs: A Systematic Literature Review Adrian MacKenzie, Senior Analyst/Student, Dalhousie University/Memorial University of Newfoundland
47	RF	Politics and policy-making in Canadian cancer drugs: The role of Avastin funding in Ontario in shaping the pan-Canadian Oncology Drug Review Anson Tang, Clinical Lecturer, University of Waterloo
20		Primary Care Reform in Ontario: Impact on the supply and distribution of family physicians from 2002-2010 Michael Green, Director, Centre for Health Services and Policy Research, Queen's University
38	S	Quality of Care in Primary Healthcare Clinics (PHCs) in Manitoba: A Comparative Study Saila Parveen, Graduate Student, University of Manitoba
11	S	Shiny and new: examining patient and physician use of non-oral osteoporosis medications in Ontario, Canada Suzanne M Cadarette, Leslie Dan Faculty of Pharmacy, University of Toronto
50		The Impact of Audit and Feedback on Community Pharmacist's Provision of Patient Care Services: A randomized trial Nancy Winslade, Assistant Professor, McGill University
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18		The Road to Learning Health Care Systems in Canada William Gardner, Professor of Pediatrics, Dalhousie University
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12		Does One Program Look Like The Other? A systematic review of practices to measure fidelity to early psychosis intervention standards Chiachen Cheng, Physician-Researcher, St. Joseph's Care Group, Research Department
7		Electronic personal health records in Canada: priority issues for implementation Erik Breton, Research associate, Centre de recherche du CHU de Québec
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14		MAAP-NS: Models and Access Atlas of Primary Care Providers in Nova Scotia: Preliminary findings of a population study Emily Gard Marshall, Assistant Professor, Dalhousie Family Medicine
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20		Private Drug Plans in Canada, 2013 Elena Lungu, Senior Economic Analyst, Patented Medicine Prices Review Board
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53		Representativeness and Data Quality in the Canadian Primary Care Sentinel Surveillance Network (CPCSSN) Tyler Williamson, CPCSSN Senior Epidemiologist, Queen's University
32		Smoking: A population-based analysis of the healthcare burden attributable to smoking in Manitoba, Canada Nathan C Nickel, Research Scientist, Assistant Professor, Manitoba Centre for Health Policy, Faculty of Medicine, University of Manitoba
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40		Supporting Professional Socialization for a New Generation of Nurses and Health Professionals Using Innovative Knowledge Translation Sheri Price, Assistant Professor, School of Nursing, Dalhousie University
44		Supporting Quality in Home Care Through Public Reporting Morgan Slater, Project Lead, Health Quality Ontario
22		The Feasibility, Acceptability and Effects of an Interprofessional Nurse-Led Mental Health Promotion Intervention in Older Home Care Clients Maureen Markle-Reid, Associate Professor and Canada Research Chair, Aging, Chronic Disease and Health Promotion Interventions, Scientific Director, Aging, Community, and Health Research Unit, McMaster University
46		The Health Care Cost of Dying: A Population-Based Examination across Health Care Sectors in the Last Year of Life Walter Wodchis, University of Toronto
10		The Timing of Teen Pregnancy and High School Enrollment: A PATHS Equity for Children Project Dan Chateau, Assistant Professor, Manitoba Centre for Health Policy, University of Manitoba
50		The use of persona-scenario exercises to co-develop of the TAPESTRY program Ruta Valaitis, Dorothy C. Hall Chair in Primary Health Care Nursing, McMaster University
15		What are the experiences of patient calling primary care provider offices after hours? MAAP-NS: A Nova Scotia Population Study Emily Gard Marshall, Assistant Professor, Dalhousie Family Medicine
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Concurrent Sessions Guide

Guide des séances simultanées

Panel Presentation

Toronto Ballroom III (Convention Level)

Présentation en Panel

Toronto Ballroom III (Niveau « Convention »)

A1.1 Partnerships for healthcare transformation through eHealth innovations

Presented by **ANTHONY LEVINSON**, McMaster University; **ANNE HOLBROOK**, Professor and Director, Division of Clinical Pharmacology and Therapeutics Department of Medicine, and Senior Scientist, Center for Evaluation of Medicines, McMaster University; **JENNIFER STINSON**, Peter Lougheed CIHR New Investigator and Scientist, Child Health Evaluative Sciences and Nurse Practitioner, Chronic Pain Program and Associate Professor, Lawrence S. Bloomberg, Faculty of Nursing, Hospital for Sick Children and University of Toronto; **JOSEPH CAFAZZO**, Lead, Centre for Global eHealth Innovation, University Health Network Senior Director and Associate Professor, IBBME and IHPME, Faculty of Medicine, Medical Engineering and Healthcare Human Factors / University of Toronto; **ALEX MIHALIDIS**, Barbara G. Stymiest Research Chair in Rehabilitation Technology; Dept. of Occupational Science & Occupational Therapy / Institute of Biomaterials & Biomedical Engineering; Associate Professor, University of Toronto

The rising cost of health care, the aging demographic, and the increasing prevalence of chronic conditions are demanding substantive changes in health care delivery systems. Transformative innovations in health care delivery are needed. A key enabler of transformation is health information technologies. Building on Canada's investment in electronic health records, the current climate is ideal to support the development of evidence-based e-Health innovations that will empower patients as partners in their care, support evidence-based individualized care based on a new generation of decision-support to harness clinical, social and genomic data, link care across the continuum to improve access, safety and improved efficiencies, and monitor health system performance, as well as population health. Some examples of e-Health innovations include online patient portals, e-consults, e-visits, and mobile applications, and social media to create personal and community. Moreover, novel uses of digital data have been used to create population-level health maps for detection of emerging epidemics such as H1N1 in Mexico. Canada is a recognized leader in the routine collection of data in population-wide databases that could provide essential information for more extensive population and health system performance-monitoring. In 2012, CIHR-IHSPR launched the eHealth Innovation funding opportunity to develop meaningful partnerships between academia, industry and the health care system to ensure that innovations are co-developed, tested in patient, clinical and population health environments, assessed to determine cost-effectiveness, commercialized where successful, and adopted to deliver health impact. This session will bring together selected CIHR-funded researcher-decision maker partners to highlight how collaboration with innovative enterprises and international partners contributes to transformation of current programs of delivery.

Panel Presentation

Tom Thompson (Convention Level)

Présentation en Panel

Tom Thompson (Niveau « Convention »)

A2.1 Driving Clinical Innovation in Alberta Health Services: Strategic Clinical Networks

Presented by **TOM NOSEWORTHY**, Associate Chief Medical Officer, Alberta Health Services; **TRACY WASYLAK**, Vice-President Strategic Clinical Networks, Alberta Health Services; **CY FRANK**, CEO, Alberta Innovates - Health Solutions

Achieve best outcomes .Seek greatest value for money .Engage clinicians in all aspects of the work. In June 2012, AHS introduced SCNs as collaborative clinical teams, with a provincial strategic mandate to achieve the stated objectives for a population of patients. SCNs are led by clinicians, driven by clinical needs, based on best evidence and supported by research expertise, infrastructure, quality improvement & analytic resources. To date, each SCN has taken on at least one major project to drive clinical innovation or to reassess current technologies. A disciplined and province-wide approach is in place for priority-setting, assessing value for money and benefits realization, maturity assessment, and a robust evaluation methodology. Novel methods include patient engagement researchers. Ten SCNs are operational, and early measurable value is demonstrable. As examples, led by Seniors SCN there has been reduction of inappropriate antipsychotic medications from 38% to fewer than 20% at 11 early adopter sites. CV & Stroke SCN is implementing province-wide the Harmonized C-Change Guideline, with 1000 Primary Care physicians, 78 community pharmacies & 1 major employer. Obesity Diabetes Nutrition SCN has implemented 'Early Recovery After Surgery,' with two early adopter sites reporting length of stay decreases from 14 to 5 days. Surgery SCN has worked with the Safe Surgery Checklist and provincial compliance has increased to 87% (from 47%). Bone & Joint SCN has reduced readmissions by 1%, with 32,000 bed days saved in Arthroplasty. Each SCN has a Patient Engagement Researcher. SCNs are driving clinical innovation, using best evidence and research. They represent deliberate, system-wide efforts to promote clinically led change and, using measurement & management, to scale knowledge to action at a province-wide level. Work is underway in all dimensions of quality and demonstrable results are being realized.

Mental Health

Jackson (Convention Level)

Santé mentale

Jackson (Niveau « Convention »)

A3.1 The impact of shared care on psychiatric re-hospitalization

Presented by **PAUL KURDYAK**, Director, Health Systems Research, Centre for Addiction and Mental Health

We studied shared care - care involving both primary care physicians and psychiatrists - in the management of mental illnesses. We studied whether having a visit with primary care physician, psychiatrist, or both affected the likelihood to be re-hospitalized among individuals hospitalized with a diagnosis of schizophrenia, depression, or bipolar disorder. We created a cohort of individuals hospitalized with a diagnosis of schizophrenia, depression, or bipolar disorder between April 1, 2007 and March 31, 2011. We measured baseline characteristics such as age, sex, income, comorbidities, prior hospitalizations, physician visits, and Emergency Department visits. We determined whether individuals had no physician visits, primary care physician visits only, psychiatrist visits only, within 30 days of discharge. The main outcome was rehospitalization between 31 and 60 days from the index discharge. Among 16,249 individuals hospitalized with a diagnosis of schizophrenia, 44.6% saw no physician, 18.3% saw primary care only, 23.6% saw psychiatrist only, and 13.5% saw both within 30 days of discharge. Among 25,959 individuals hospitalized with a diagnosis of depression, 37.0% saw no physician, 28.7% saw primary care only, 16.7% saw psychiatrist only, and 17.6% saw both within 30 days of discharge. Among 14,934 individuals hospitalized with a diagnosis of bipolar disorder, 36.6% saw no physician, 23.4% saw primary care only, 21.2% saw psychiatrist only, and 18.9% saw both within 30 days of discharge. For all three diagnoses, there was no difference in re-hospitalizations between 31 and 60 days post-hospitalization discharge. A significant proportion of patients discharged from a psychiatric hospitalization have visits with neither a primary care physician nor psychiatrist. Having a physician visit post-hospitalization discharge did not reduce the likelihood to be re-hospitalized for individuals with a diagnosis of schizophrenia, depression, or bipolar disorder.

Co-Author(s): **Simone Vigod**, Women's College Hospital Research Institute; **Alice Newman**, Institute for Clinical Evaluative Sciences; **Thérèse Stukel**, Institute for Clinical Evaluative Sciences

A3.2 Self-reported mood and subsequent healthcare use in older emergency department patients: Results of a multicenter prospective cohort study

Presented by **ALIYA RAMJAUN**, Research Associate, Geriatrics Research Program, Mount Sinai Hospital

To identify associations between geriatric syndromes assessed using the interRAI emergency department (ED) contact assessment and self-reported mood, and determine whether self-reported mood in the ED can predict unplanned health service use (return ED visits, hospitalization, discharge to alternate level care, comprehensive geriatric assessment (CGA)) in seniors ≥ 75 years. A multicenter prospective cohort study was conducted. Mood symptoms including depression, anhedonia and anxiety were assessed. Patients were followed-up for 90 days to determine frequency and dates of subsequent ED visits, hospitalizations, and discharge to alternate level care facilities. Whether an individual required CGA was noted at the index visit. Associations between mood and geriatric syndromes were assessed using X2 tests for categorical variables. One-way analysis of variance (ANOVA) was used to assess the association between mood symptoms and continuous variables. A series of univariate logistic regressions were performed to quantify the impact of mood on experiencing each outcome. Of the 2,101 patients included in this study, 875 (42.60%) were discharged home, and of these 346 (39.54%) returned to the ED. 1,079 (52.53%) were admitted to hospital at the index ED visit, and 224 (10.91%) were discharged to either alternate level or long-term care. Nearly all domains assessed through the ED-CA demonstrated a significant association with mood, with the exception of sex, cognition, comprehension and traumatic injury. Mood also emerged as a significant predictor of hospitalization at the time of the index ED visit (OR 1.19, 95% CI 1.07-1.31), even after adjustment for the impact of comorbidities noted at the time of the index ED visit. The results of this study indicate that a number of associations exist between geriatric syndromes and the presence of self-reported mood symptoms amongst older ED patients. Self-reported mood may also impact the perceived severity of a given physical illness or presenting complaint, and therefore, the decision to hospitalize a patient.

Co-Author(s): **Samir Sinha**, Geriatrics Research Program, Mount Sinai Hospital; **John Hirdes**, School of public health and health systems, University of Waterloo; **Andrew Costa**, Geriatrics Research Program, Mount Sinai Hospital

A3.3 Bridging the gap between health and social services for youth and young adult mental health

Presented by **BRONWYN DAVIES**, Executive Director, New Brunswick Department of Health; **JUDY ARMSTRONG**, Horizon Health Network

As part of a broader cross-provincial collaborative involving 17 regional health authorities and with support of the four Atlantic provincial Health departments, this improvement project looks at the implementation of an upstream community-based mental health engagement and education initiative aimed at improving, promoting and maintaining the well-being of young adults ages 16-29. Working collaboratively through an applied improvement approach, this action-oriented initiative is utilizing measurement and evaluation tools to capture and track the needs of young adults requiring access to non-clinical mental health services and support. Utilization of a mixed methodology, encompassing a variety of quantitative and qualitative methods including but not limited to focus groups, key informant interviews, surveys, participant assessments, and primary care admissions data. Measures include referral and participation rates, community and system knowledge and awareness, primary care admission rates, service-provider partnerships, employment and housing rates (e.g. impoverishment reduction, appropriate and relevant use of services). Together with clients, families, service providers and community stakeholders, this work is demonstrating positive impacts to the quality of life and the social determinates of health of the participating young adults. Ripple effects of this project are being realized within current health and social services. This evaluative approach has resulted in a framework for the development of community-based youth and adult mental health services across a health system. Early results have demonstrated a need for cohesion across health and social services to effectively design and deliver integrated care for young adults with mental illness or addiction outside of clinical settings. Grappling with efficiency, this work is aligning interfaces across the system to ensure a more seamless communication stream between providers and care services. The service is also tackling comprehensiveness of care through a non-referral service that addresses not only behaviours but also social determinants of health. This work offers a rich case of an evaluative approach to aligning services with client needs. Drawing on a first-hand account of designing, implementing and evaluating a collaborative approach to systems improvement, this project shows the importance of narrowing the divide between health and social services by developing preventative, recovery-based services for youth with mental health challenges.

Co-Author(s): **Bronwyn Davies**, New Brunswick Department of Health; **Kimberly Chenier**, Horizon Health Network

A3.4 Telephone coaching increases adherence to depression self-care tools among primary care patients with chronic physical conditions: A randomized trial

Presented by **JANE MCCUSKER**, Professor, McGill University

1) Assess the effect of telephone coaching on patient-reported adherence to depression self-care tools among primary care patients with chronic physical conditions; 2) Assess differences between coaches in patient-reported intervention adherence; 3) Identify patient characteristics associated with adherence; 4) Assess short-term effects of the intervention on depression symptoms. Primary care patients aged 40 + with chronic physical conditions and comorbid depressive symptoms were recruited into a randomized trial to compare provision of a Depression Self-Care Toolkit with (intervention) or without (control) telephone coaching by a lay coach. 3 core tools included a Workbook with informational and skills-building sections; an informational DVD; and a Mood-Monitoring tool. 5 supplementary tools were also provided. Intervention group patients were offered weekly telephone coaching sessions for the first 3 months. At follow-up 3 months after randomization, patients were interviewed regarding their use of the tools and the severity of their depression symptoms (PHQ-9). Among 399 eligible patients, 223 patients (55.9%) were randomized, and 190 (85.2%) of these completed 3-month follow-up. Sample characteristics included: mean age 55.1, 83.7% female, 82.6% at least high school education, 26.1% low income, 35.8% major depression, 19.5% co-morbid anxiety, 74.2% chronic pain, SF-12 Physical Component Summary mean score 37.2.. The intervention was delivered as planned (2+ sessions) among 95% of the intervention group. Patients in the intervention group reported significantly greater use of the skills-building sections of the Workbook (73.7% versus 42.9%), $p < .001$ but not the other tools. No patient characteristics predicted tool use. Intervention group patients with probable major depression completed fewer coach contacts. The intervention had a significant effect on severity of depression symptoms (7.8 vs 11.5, $p < .001$). In a primary care population with chronic physical conditions, a low-intensity intervention (telephone coaching by a lay coach) can improve adherence to depression self-care tools targeted by the intervention and reduce the severity of depression symptoms in the short-term. Longer-term follow-up is needed to determine whether the intervention effectiveness is sustained.

Co-Author(s): **Martin G. Cole**, St. Mary's Hospital Center; **Mark Yaffe**, St. Mary's Hospital Center; **Erin Strumpf**, McGill University; **Maida Sewitch**, McGill University

Health Economics

York (Lobby Level)

Économie de la santé

York (Réception de l'hôtel)

A4.1 Characterizing Ontario's High-Cost Users (HCU) of health care: the demographic, socio-economic, behavioral and clinical characteristics over time

Presented by **LAURA ROSELLA**, Scientist, Public Health Ontario

There has been renewed interest in health care sustainability and high-cost users (HCU). Previous studies have been limited in studying the range of demographic, social, and behavioral determinants. We used a novel approach linking population health surveys to health administrative data to investigate a broader range of predictors. We linked three cycles of the Canadian Community Health Survey (CCHS) for Ontario to medical claim data from 2003-2008 for ages 29 and older (N 91,223). Participants were ranked according to gradients of health spending (Top 1%, Top 2-5%, Top 6-50% and Bottom 50%) using a person-centered costing macro. We analyzed two cohorts using multinomial logistic regression to characteristics associated with spending categories. The first analysis examined characteristics of HCU based on baseline characteristics in the year following. The second cohort (N = 55,734) excluded Top 5% at interview and ranked respondents in each of the five subsequent years. We found that HCU tended to be older, white females, have less than post-secondary education, lower household income, multiple co-morbidities, and report poorer self-perceived health. Further, HCU were often former smokers and overweight or obese. Age and co-morbidities were the strongest predictors in the multivariate model. In the trajectory analysis, 5.8% ranked in the Top 1% at least once during follow-up and 13.2% ranked in the Top 5%. Notably, 45% of the Top 1% were never in the Top 2-5% suggesting that HCU transitions do not always occur gradually. Of the Top 5% HCU, 35% persisted for at least two years and only 307 (4%) remained HCU in all five years suggesting lack of persistence. Analysis is ongoing to further model predictors of transitions. This study provides a novel perspective on factors associated with HCU that will inform policies to improve population health and achieve sustainability of health services. These findings highlight the importance of understanding the broader range of upstream determinants and considering a population health perspective focused on prevention.

Co-Author(s): **Tiffany Fitzpatrick**, Public Health Ontario; **Walter Wodchis**, University of Toronto; **Andrew Calzavara**, Institute for Clinical Evaluative Sciences; **Vivek Goel**, Public Health Ontario

A4.2 Measuring the level and determinants of health system efficiency in Canada

Presented by **MICHEL GRIGNON**, Associate Professor, McMaster University

The Canadian public and decision-makers alike are increasingly interested in ensuring health systems resources are used efficiently. This study brings together information on the resources that go into, and the objective achieved by, regional health systems in Canada and measures the level and determinants of health system efficiency. Data envelopment analysis (DEA) was used to calculate efficiency scores at the regional level. An exploratory step-wise regression analysis identified the factors associated with variations in efficiency scores. Interviews with health system leaders identified the objective of the health system for efficiency to be measured against is that Canadians have access to timely and effective health care when needed; this was approximated with deaths from treatable causes. Health system resources were measured in monetary terms for five major components of health spending. Socio-demographic factors were also included as inputs in the DEA to compare health systems sharing similar characteristics. Efficiency scores from seven DEA models with different specifications ranged from 0.65 to 0.82 on average across the health regions. This translates into a range of 12,600 to 24,500 premature deaths that could possibly be prevented in Canada per year, without incurring additional costs. Results of the regression analysis found eight variables with statistically significant associations with efficiency scores. These included three measures reflecting potentially missed prevention opportunities: prevalence of smoking, obesity, physical inactivity and multiple chronic conditions; one additional clinical factor - hospital readmission rates, and two operational factors - use of hospital for 'alternate level of care' patients, and investment in primary care. In addition, contextual factors such as inequitable access to physician services and higher average income in the population negatively affected efficiency. Efficiency gains may be realized by addressing modifiable risk factors and their causes, as well as through improved management and organizational practices. Further research could examine the causal relationships between the indicators associated with efficiency, as well as to identify some of the managerial actions that can lead to efficiency gains.

Co-Author(s): **Sara Allin**, CIHI; **Diana Ridgeway**, CIHI; **Li Wang**, McMaster University

A4.3 Who are the high-cost users? A method for person-centred attribution of health care spending

Presented by **SARA GUILCHER**, Post Doctoral Fellow, St. Michael's Hospital, HSPRN

Among individuals accounting for the top percentiles of Ontario health care expenditures: (1) To develop and use person-centered care episodes to describe the main clinical reasons for expenditures; (2) To attribute costs related to specific episodes by health sector (e.g., emergency department, hospitalizations, home care, physician billings). Data were drawn from linked administrative databases of all publicly funded health care in Ontario for individuals who comprised the top 1 % and 5% of total costs between April 1, 2010 and March 31, 2011. Care episodes started with acute care admissions and temporally linked to end after a service gap of 30 days. For each episode of care, the reason for admission was categorized into one of: pregnancy, low birth weight, iatrogenic causes, trauma, mental illness and addictions, avoidable acute conditions, acute planned surgical episodic elective, acute planned medical, cancer, and other. Costs were calculated for each episode of care and compared across individuals. A total of 662,248 and 132,230 individuals were identified in the top 5% and 1% of high cost users, respectively. As of April 1, 2010, 11% of individuals were residing in an institution for the top 5% and 33% for the top 1%. The most common reasons for episodes were: acute unplanned medical (29.8%), acute planned surgical (11.9%) and iatrogenic causes (7.9%). Ambulatory care sensitive conditions accounted for a relatively small proportion of episodes. Descriptive data showed that the median number of chronic conditions was 8 and more than half of persons were on 10+ different drugs. While a major cost driver was acute care services, long-term care services had a particularly pronounced effect on certain populations. There is a need to understand the underlying factors related to episodes of care for high cost users, in order to assist with targeted interventions and policy planning. Our study provides a novel methodological approach to categorize high cost users into meaningful person-centered categories.

Co-Author(s): **Walter Wodchis**, University of Toronto, Institute for Clinical Evaluative Sciences, Health System Performance Research Network; **Susan Bronskill**, Institute for Clinical Evaluative Sciences, Health System Performance Research Network, University of Toronto

A4.4 Predicting Patients with High Risk of Becoming High Cost Healthcare Users

Presented by **YURIY CHECHULIN**, Senior Methodologist, Ontario Ministry of Health and Long-Term Care; **SAAD RAIS**, Senior Methodologist, Ontario Ministry of Health and Long-Term Care

Small proportion of patients consume majority of healthcare resources. A proactive approach is to target interventions on patients who are at risk of becoming high cost users (HCUs). It requires some mechanism to predict high-risk patients accurately before substantial avoidable costs have been incurred and health status has deteriorated further. The authors developed a predictive model using logistic regression to identify patients at risk of becoming HCUs in Ontario, where HCUs were defined as the top 5% highest cost incurring users. The cohort of patients included all Ontario residents that were serviced by the Ontario healthcare system during FY2009/10. Information was collected on age, sex, Rurality Index of Ontario, clinical diagnoses, deprivation index, and number of visits for all care types from the current year and previous two years (to account for disease progression). Out-of-sample validation was performed. The model achieved a very strong C-statistic: 0.865. Both the ROC curve and goodness-of-fit curves showed very good out-of-sample model performance. Sensitivity, specificity, positive and negative predictive values, and accuracy for validation (out-of-sample) cohort were calculated. If the top 5% patients at-risk of becoming HCUs are followed, the achieved sensitivity is 42.2% and specificity is 97%. Practical implementation of the model could occur in a number of ways including providing health card numbers of patients at risk to primary care providers for secondary prevention; providing, aggregate information about HCUs so that primary providers can identify the types of patient populations that have historically consumed the most resources; or developing interventions that address specific needs of patient populations at high risk of becoming high users. This is the first attempt in Ontario to develop and validate a tool for predicting patients at risk of becoming HCUs. This predictive model may be used to support 'Ontario's Action Plan for Health Care', which calls for 'better patient care through better value from our health care dollars'.

Co-Author(s): **Amir Nazerian**, Ontario Ministry of Health and Long-Term Care; **Saad Rais**, Ontario Ministry of Health and Long-Term Care; **Kamil Malikov**, Ontario Ministry of Health and Long-Term Care

Pharmaceutical

Simcoe (Lobby Level)

Pharmaceutiques

Simcoe (Réception de l'hôtel)

A5.1 Potential savings from universal public pharmacare in Canada

Presented by **STEVE MORGAN**, Professor and Director, Centre for Health Services and Policy Research (UBC)

Every developed country in the world with a universal health care system offers universal coverage of prescription drugs at little or no cost to patients...except Canada. We sought to compute savings from changes in drug prices and prescribing practices that might occur under a universal pharmacare plan. We combined drug utilization and expenditure results found in the Canadian Rx Atlas, 3rd Edition, with pricing data from Canadian and international drug plan formularies. The Rx Atlas results provided, for 11 high-volume prescription drug classes, the current level of utilization and spending on medicines by public drug plans, private drug plans, and by patients who are uninsured or below deductibles. To determine potential reductions in generic prices under a universal, single-payer system, we obtained prices paid in Canada (Ontario as reference province) and New Zealand for leading generic drugs in each class. We obtained potential reductions in brand-name prices from report of the Patented Medicine Prices Review Board. We set benchmarks for multi-source prescribing and generic substitution rates based on median performance of public drug plans in Canada. Spending on the 11 drug classes chosen was approximately \$10-billion in 2012/13. Almost half of this was funded by provincial drug plans, over a third by private drug plans, and a fifth by patients uninsured or below deductibles. If benchmarks for multi-source prescribing and generic substitution rates were met in Canada, spending on the selected drug classes would fall by approximately \$1.5-billion. If brand name prices were to fall to levels in the United Kingdom, spending would fall by nearly \$1-billion. If generic prices were to fall to levels conservatively set above prices in New Zealand, spending would fall by approximately \$2-billion. If prescribing and generic substitution targets were met AND generic and brand name prices fell to international benchmarks, spending would fall by nearly \$4.5-billion. We left payments for pharmacists' professional fees unchanged (at approximately \$2.8 billion) in all scenarios. Canada could save billions of dollars every year if universal public drug coverage was offered for medicines in leading therapeutic categories. Savings at prices found in other countries are significant enough that a well implemented plan to extend universal public coverage for leading drug classes would be revenue neutral for governments, while savings unions, employers and uninsured Canadians billions every year.

A5.2 Expenditure Trends and Cost Drivers of Biologics in Public Drug Plans in Canada

Presented by **HU LU**, Research Manager, Health Canada

This study presents an analysis of expenditure trends and cost drivers of biologics in provincial public drug plans relative to non-biologics. It also compares growth patterns and cost drivers between public and private drug plans. The study examines expenditure trends of biologics compared to non-biologics by using the CIHI's NPDUIS database from 2004/05 to 2011/12. Drugs are identified and aggregated by the Anatomical-Therapeutic-Chemical level 3. To examine factors contributing to cost growth, the increase in drug costs was decomposed into increases driven by changes in utilization, average unit cost, volume, demographic factors, etc. Additionally, since public and private plans often have different client populations with different needs, the study also compared growth patterns and cost drivers between public and private drug plans. The study found that biologics have become a major driver of drug cost growth in public plans. It accounted for 91.2% of total cost growth in 2011/12. The cost of biologics increased by 230% from 2004/05 to 2011/12. The share of biologics as a percentage of total drug costs more than doubled in the period. The rapid cost growth was driven mainly by increasing per claim cost, which contributed 70% of the total growth. Immunosuppressant and ocular vascular disorder agents accounted for 85% of cost growth of all biologics. A higher proportion of the cost of biologics, compared to non-biologics, was reimbursed by public plans. We also found that public and private plans have overall similar cost growth patterns, despite some differences in certain categories. Biologics became the biggest cost driver for public drug plans in recent years. It will be important to consider options to better manage the costs of biologics, in addition to the current policy focus on generic drug pricing, to avoid future cost escalation.

A5.3 Public Drug Plan Expenditures, 2012/13

Presented by **GREG MCCOMB**, Senior Economist, Patented Medicine Prices Review Board; **ELENA LUNGU**, Senior Economist, Patented Medicine Prices Review Board

The purpose of Public Drug Plan Expenditures 2012/13 is to facilitate informed decision-making on prescription drug spending by producing a comprehensive annual report on the topic. Public Drug Plan Expenditures 2012/13 001 was prepared by the PMPRB for the National Prescription Drug Utilization Information System, a federal/provincial and territorial initiative that provides critical, comprehensive analysis of public drug plan expenditure in Canada. After years of double-digit growth, annual growth in expenditures for prescription drugs in Canada has slowed considerably in recent years. The approach is to start at a high-level and then delve successively deeper into factors that drive change. The first part provides a summary of current-year policy changes that could impact public drug plans, followed by high-level statistics and trends from 2008/09 to 2012/13. Given the complex forces at work, a cost-driver model identifies and quantifies four main categories of effects - demographic, volume, price and drug mix - in order to understand the impact they have on expenditures from 2011/12 to 2012/13. Complementary statistics illuminate important aspects or trends associated with each of the effects. One of the findings is that several key factors had an overall 'push-pull' effect on expenditures. For example, both changes in drug price and generic substitution had a large, negative impact on drug cost, resulting in a combined expenditure reduction of 11.6% from 2011/12 to 2012/13 for NPDUIS public drug plans. On the other hand, demographic change such as increases in beneficiary populations (7.5%) and drug mix effects such as expenditure growth of biologics (4.5%) had positive impacts. Although growth in public drug plan expenditures has slowed in recent years, there were numerous, complex forces at work that had a 'push-pull' effect on cost.

Co-Author(s): **Greg McComb**, Patented Medicines Prices Review Board; **Elena Lungu**, Patented Medicines Prices Review Board; **Orlando Manti**, Patented Medicines Prices Review Board; **Gary Warwick**, Patented Medicines Prices Review Board

A5.4 The Impact of and audit and feedback intervention to reduce potentially inappropriate prescriptions: Evaluating the IMPRxOVE program in Manitoba

Presented by **DAN CHATEAU**, Assistant Professor, Manitoba Centre for Health Policy, University of Manitoba

In June, 2011, Manitoba Health (MH) engaged Care Medical Technologies (CMT) to administer an audit and feedback program to provide education materials to physicians on potentially inappropriate prescribing. We present a comprehensive evaluation of the effectiveness of the program in reducing this behaviour for a selection of quality indicators. The IMPRxOVE program was initiated as a randomized trial with physicians being assigned to an intervention (n=701) or control group (n=716). Eight quality indicators (QIs) were run initially with 7 more added in January 2012. Data were analysed with an intention-to-treat approach, determining whether the change over time in prescription rates for the intervention group was different from the change over time for the control group. In addition, where a significant effect was found, latent group trajectory models were run to determine which physicians were more likely to respond to the intervention. For several indicators a significant reduction in the rate of QI triggers was found for the intervention group but not for the control group, with significant group*time interactions. For example, prescriptions for multiple benzodiazepines for more than 60 days was reduced for adults (18-65), from ~1.2 QI triggers per physician to ~0.95 QI triggers. The effect was seen within 6 months of the introduction of the program and remained until the end of the study period more than 1 year later. In addition, distinct subgroups of physician prescribing behaviour were identified in the latent group analysis, identifying a large group of physicians who responded to the intervention and a group that did not respond to the intervention. This is the first comprehensive RCT of this type of physician based intervention, providing valuable information for policy. As implemented in Manitoba, this audit and feedback intervention had a significant effect on prescribing behaviours of physicians, reducing the rate of potentially inappropriate prescriptions for several indicators.

Co-Author(s): **Murray Enns**, University of Manitoba; **Okechukwu Ekuma**, Manitoba Centre for Health Policy, University of Manitoba; **Ina Koseva**, Manitoba Centre for Health Policy, University of Manitoba

Chronic Disease Management

Osgoode (3rd Floor)

Maladies chronique

Osgoode (3^e étage)

A6.1 Optimizing Chronic Disease Management in the Community (Outpatient) Setting: an evidence synthesis

Presented by **NAUSHABA DEGANI**, Manager, Research Methods, Health Quality Ontario

Timely and effective outpatient management of chronic conditions can prevent the onset of complications, reduce the risk of acute episodes, prevent hospitalizations, improve clinical and health status and reduce associated mortality. This synthesis will identify what evidence-based services are effective at optimizing chronic disease management (CDM) in the community (outpatient) setting? A number of interventions that impact CDM for selected conditions were identified through a scoping process. These interventions were prioritized for a comprehensive review with the guidance of an expert panel. The prioritized interventions included: advanced access, continuity of care, specialized nursing care, discharge planning, in-home care, self-management, screening/ treatment for depression and electronic tools for health information exchange. The interventions were critically reviewed for outcomes related to health care utilization, mortality, morbidity, functional status, quality of life and patient satisfaction. The findings were aggregated and synthesized to develop a comprehensive set of recommendations for improving CDM in the community. Strategies that were found to be clinically effective for CDM (and should be considered for implementation/ expansion in Ontario) included: specialized nursing care, continuity of care, in home care, individualized pre-discharge planning, as well as the results from past HQO reviews including evidence from 'Aging in the Community'. Strategies that were found to be clinically ineffective for CDM included: advanced access, screen/treat interventions for depression and the addition of post-discharge support to pre-discharge planning. Strategies that require additional evidence before a recommendation can be made include e-Tools for health information exchange and self-management using the Stanford Chronic Disease Self-Management Program. The Ontario Health Technology Advisory Committee made a series of recommendations related to these interventions. Through a series of systematic reviews, expert panel input and with accompanying economic evaluation and qualitative meta synthesis of key concepts, a series of recommendations were developed that may be helpful in guiding future policy and are being used to direct implementation efforts related to CDM in the community setting.

Co-Author(s): **Kristen McMartin**, Health Quality Ontario

A6.2 Transitions of Care – The hospital discharge experience of patients with complex chronic disease

Presented by **JULIA HO**, Research Assistant, Ryerson University

The objective of this study was to determine hospital discharge concerns reported by persons with complex chronic conditions, defined as the presence of one or more health conditions that require a high level of resource use from the health care system. This study was a secondary analysis of qualitative data from a large scale, mixed methods study which took place in 2011 at Bridgepoint Hospital, a complex continuing care and rehabilitation facility in Toronto, Canada. One-hundred and sixteen patients were interviewed individually using a self-designed survey comprised of open- and closed-ended questions. All data related to hospital discharge was extracted and examined using qualitative descriptive analysis. Each theme was analyzed to determine if there were any apparent trends. Three overarching themes were identified representing key discharge concerns of hospital patients: process (next steps in the care plan, friction in the provider-patient relationship, premature discharge), consequences (relocation, impact on family, leaving the comforts and security of the hospital), and needs (availability of home care, managing daily activities, navigating the pre-disability home). The three themes represented patients of all age groups, sexes, different marital status groups, and a range of health conditions. A re-design of our hospital-centric health care model is essential in providing seamless transitions in patient care across the continuum. The integration of hospital in- and out-patient services, home care, and community services is necessary to improve the patient discharge experience.

Co-Author(s): **Kerry Kuluski**, Bridgepoint Collaboratory for Research and Innovation; **Ashlinder Gill**, Bridgepoint Collaboratory for Research and Innovation

A6.3 Describing patterns of healthcare use throughout British Columbia

Presented by **RUTH LAVERGNE**, Doctoral Candidate, University of British Columbia

Geographic variation in healthcare service use has been widely documented. However, categories of service use are often examined in isolation, and comparisons made on the basis of geographic definitions unrelated to the healthcare system. We describe a novel approach for summarizing patterns of service use throughout British Columbia (BC). Administrative data from multiple sources were used to obtain healthcare costs across the following categories: physician services (primary care, medical specialist, and surgical specialist), diagnostics (laboratory and imaging), hospital care (medical, inpatient elective surgery, day surgery, trauma and emergency surgery), home supports, residential care, and pharmaceuticals. Average age-sex standardized per-capita costs were calculated by category for each of BC's 79 Local Health Area (LHAs). All services were captured and attributed to a patient's LHA of residence, regardless of where they were accessed. Cluster analysis was used to group LHAs that were similar in their volume and mix of healthcare services. Variation in total per-capita healthcare spending was modest, but there was significant variation within individual categories of care. Cluster analysis identified patterns of healthcare use in Vancouver as distinct from Victoria and Vancouver suburbs, non-metropolitan LHAs, and remote communities. Standardized per-capita spending on medical specialist use and residential care was higher in Vancouver, while spending on day surgery, inpatient elective surgery, and pharmaceuticals was higher in Victoria and suburbs of Vancouver. Non-metropolitan areas had lower spending on GP office visits, medical specialists, and surgical specialists, and higher spending on hospital services than in the two major metropolitan centres, but distinct sub-groups were also identified. Remote communities had very low use of GP services, home and community care, and high hospital use. The face validity of results is remarkable, as geographically similar areas were grouped based on patterns of healthcare spending alone. While total spending was similar, patients encounter the healthcare system very differently depending on where they live. Further research will explore how the organization of care shapes health outcomes.

Co-Author(s): **Kim McGrail**, CHSPR, University of British Columbia

A6.4 Ontario Renal Network Mentorship Pilot Program: the Mentee Perspective

Presented by **JOCELYN PANG**, Student Research Analyst, Ontario Renal Network

The Ontario Renal Network (ORN) Mentorship Pilot Program was a 1-year program linking primary care providers (PCP) with nephrologists in a collaborative mentor-mentee relationship to improve primary care for patients with chronic kidney disease (CKD). This evaluation describes PCPs experiences as mentees and self-reported impact of the pilot program. The ORN conducted an open call to recruit PCPs to participate as mentees in the program. Prior to implementation, a pre-survey was distributed to capture mentee demographics, frequency of contact with CKD patients, perceived comfort/knowledge in CKD care, barriers to CKD care, and ease/satisfaction of nephrologist consultation. At the close of the pilot, a post-survey with the same measures was distributed to mentees to allow for baseline comparison. It also directly asked mentees to provide their perceived usefulness of the program. Both surveys were distributed to all enrolled mentees via email and primarily used nominal and ordinal measurements. Of 154 enrolled mentees, 138 and 98 completed the pre and post-surveys, respectively. Over 75% of mentees reported increased knowledge/comfort in screening, identifying, and managing CKD patients post-program. 64% reported the program helped reduce barriers to providing CKD care. 34% reported it was extremely easy to access their mentor nephrologist, compared to only 4% reporting extreme ease in accessing nephrologists pre-program. 59% felt email interactions with mentor nephrologist were extremely satisfying, compared to only 10% rating nephrologist consults as extremely satisfying pre-program. Post-program, 69% felt the program was very or extremely helpful, 43% felt program education was always applicable to their practice, 53% were extremely likely to recommend the program to a colleague/friend, and 87% would utilize the program if re-offered in the future. Survey results suggest that the pilot program was effective in increasing knowledge/comfort in CKD care, reducing barriers to providing CKD care, and increasing ease and satisfaction of nephrologist consultation. These findings support continuation and/or expansion of the program. Next steps may include further evaluations and discussions regarding potential program improvements.

Co-Author(s): **Jocelyn Pang**, Ontario Renal Network; **Allan Grill**, Ontario Renal Network; **Monisha Bhatt**, Ontario Renal Network; **Jennifer D'Amore**, Ontario Renal Network; **Scott Brimble**, Ontario Renal Network

Public Health

Johnston (Convention Level)

Santé publique

Johnston (Niveau « Convention »)

A7.1 Risk factors for alcohol consumption among pre-adolescents in Saskatoon, Saskatchewan

Presented by **KAMALPREET BANGA**, University of Saskatchewan

Alcohol is the third leading contributor to the global burden of disease and injury and impacts healthcare utilization. This study tested the association between trying alcohol and risk factors of demographics, socioeconomic status (SES), school location, and psycho-social attributes of pre-adolescent students (grades 5 to 8) in Saskatoon health region. Students from 120 schools in 4 school divisions were surveyed using the 2011 Student Health Survey adapted from National Longitudinal Survey for Children and Youth. Prevalence of alcohol use was estimated. Logistic mixed-effects multivariable regression models were used to test the association between risk factors and the binary outcome variable, which was whether that student had ever tried alcohol. Deprivation quintile was used to measure SES. Population averaged odds ratios (ORs), 95% confidence intervals (95% CIs), and variance partition coefficients (VPC) were computed. A total of 5665 pre-adolescent students (ages 9 to 13) formed the cohort; 1287 (22.7%) of them had tried alcohol. Immediate family and friends were the most commonly reported sources of alcohol. Male sex (OR=1.79, 95% CI 1.50 - 2.12), rural school location (OR=1.32, 95% CI 1.02 - 1.67) current smoking (OR=9.46, 95% CI 5.53 - 16.18), bullying (OR=1.52, 95% CI 1.17 - 1.96), and suicide ideation (OR=1.93, 95% CI 1.36 - 2.75) were associated with greater odds of having tried alcohol. SES ($p=0.94$) and Aboriginal ethnicity ($p=0.79$) were not statistically significant in the models. The association of immigrant status with the outcome varied with anxiety level and quality of relationships with friends. Alcohol is a gateway drug that can lead to further substance abuse and affect health and education outcomes. Alcohol debut among pre-adolescents is a complex psychological and cultural phenomenon. Grade-specific school-based alcohol education programs that draw on inter-sectoral resources can benefit from information on risk factors.

Co-Author(s): **Neudorf, C.**, Chief Medical Health Officer, Saskatoon Health Region; **Cushon, J.**, Research and Evaluation, Public Health Observatory, Saskatoon Health Region; **Modupalli, S.K.S.**, Assembly of Manitoba Chiefs; **Cheryl Waldner**, Western College of Veterinary Medicine & School of Public Health, University of Saskatchewan

A7.2 Uptake of the Ontario Pharmacy Smoking Cessation Program, 2011-2013

Presented by **LINDSAY WONG**, BScPhm/PharmD student, University of Toronto

In September 2011, Ontario launched a new program to compensate pharmacies for providing smoking cessation services to public drug plan recipients. The program includes a baseline assessment and up to seven follow-up services over 365 days. We aimed to describe the use of the pharmacy smoking cessation program over time. We leveraged administrative claims data in Ontario to describe residents receiving, and pharmacies providing pharmacy smoking cessation program services from September 1, 2011 to September 30, 2013. Descriptive characteristics of residents receiving pharmacy smoking cessation services were summarized, stratified by drug plan group: seniors (aged 65 or older), or social assistance (e.g., Ontario Disability Support Program, Ontario Works, Trillium). Trends over time were examined by plotting the number of services, unique patients and unique pharmacies by month. We then restricted analyses to participants with 1-year of follow-up data to examine use of follow-up services and prescription smoking cessation medication. We identified 7,767 residents receiving pharmacy smoking cessation services: 28% seniors (mean age=70, SD=4.8; 53% male), and 72% social assistance (mean age=44 years, SD=11.8; 48% male). Patient enrolment increased steadily over time with an average increase of 311 (SD=61) patients per month, and peaks in January and April. Regions with the highest proportion of participants were: Erie St. Clair (17%), Hamilton Niagara Haldimand Brant (17%), Champlain (10%), and Central East (10%). One third ($n=1,253$) of pharmacies in Ontario participated. Sixteen percent of all patients received another pharmacy service (e.g., MedsCheck) on the same day as the smoking cessation baseline assessment. Among 4,165 patients with 1-year follow-up data, 56% received follow-up pharmacy services (59% seniors, 54% social assistance) and 74% received a prescription smoking cessation medication. Program enrolment has increased steadily since its launch, yet only a third of pharmacies participated and only 56% of patients enrolled received follow-up services. Ontario may consider strategies to improve uptake and use of follow-up services, such as public awareness campaigns and expanding access to include non-public drug plan beneficiaries.

Co-Author(s): **Andrea M. Burden**, University of Toronto; **Mina Tadrout**, Leslie Dan Faculty of Pharmacy, University of Toronto; **Nedzad Pojskic**, Ontario Pharmacists Association; **Lisa Dolovich**, McMaster University; **Andrew Calzavara**, Institute for Clinical Evaluative Sciences; **Yan Yun Liu**, Institute for Clinical Evaluative Sciences; **Suzanne M. Cadarette**, Leslie Dan Faculty of Pharmacy, University of Toronto, Institute for Clinical Evaluative Sciences

A7.3 Evidence of the early health benefits of publicly funded, school-based human papillomavirus (HPV) vaccination in Canada

Presented by **LEAH SMITH**, Student, McGill University

While publicly funded, school-based HPV vaccination programs have been offered in Canada for over six years, the real-world health benefits of such programs remain unknown. Therefore, we assessed the impact of Ontario's Grade 8 HPV vaccination program on the risk of cervical dysplasia and anogenital warts in adolescent girls. We used Ontario's administrative health and immunization databases to identify a population-based cohort of all girls in Grade 8 in 2005/06-2006/07 (program ineligible) and 2007/08-2008/09 (program eligible). HPV vaccine exposure (three doses) was ascertained during Grades 8-9 and outcomes were ascertained from Grade 10 until March 31 of Grade 12. Using a novel, quasi-experimental, instrumental variable approach (the Regression Discontinuity Design), we employed weighted local linear regression analyses to estimate the causal impact of the HPV vaccination program (program impact) and of actual HPV vaccine receipt (vaccine impact) on the incidence of cervical dysplasia and anogenital warts between eligibility groups. The cohort comprised 221,014 girls (112,155 ineligible, 108,859 eligible). Baseline covariates and follow-up (4.6 years) were similar between groups. 1.0% of ineligible girls were exposed compared with 50.6% of eligible girls. 2470 cases of dysplasia and 489 cases of anogenital warts were identified. We observed protective effects of program eligibility and program vaccination on the risk of dysplasia: 2.82 fewer cases per 1000, 95% confidence interval (CI) -4.84, -0.81 and 6.96 fewer cases per 1000, 95% CI -11.94, -0.20, respectively. Although not statistically significant, results also suggest an absolute reduction in anogenital wart risk attributable to the program (0.77 fewer cases per 1000, 95% CI -1.68, 0.14) and to vaccination (1.90 fewer cases per 1000, 95% CI -4.15, 0.34). Results were robust to sensitivity analyses. Our study provides the first evidence that publicly funded HPV vaccination in Canada is causing a reduction in cervical dysplasia and anogenital warts, two health outcomes directly targeted by the vaccination programs. Moreover, these benefits arise quickly and are observed among girls as young as 14-17 years.

Co-Author(s): **Erin Strumpf**, McGill University; **Jay Kaufman**, McGill University; **Linda Levesque**, Queen's University

A7.4 What's the real burden of formula feeding on the healthcare system – A Manitoba population-based study

Presented by **NATHAN C NICKEL**, Research Scientist, Assistant Professor, Manitoba Centre for Health Policy, Faculty of Medicine, University of Manitoba

Few studies, using individual-level data, have assessed whether the increased morbidity associated with formula feeding translates to increased healthcare burden. The objective was to use administrative data to test whether exclusive formula feeding, compared with breastfeeding, is associated with increased healthcare use during an infant's first year of life. The study used administrative data held in the Population Health Research Data Repository at the Manitoba Centre for Health Policy. The analytic cohort included Manitoba children born, 2007-2010 (n=53,351). Exposure was defined as 'infant exclusively formula fed during birth-hospital stay.' Outcome variables measured healthcare use during the infant's first year of life: hospital readmissions, days in hospital, and prescriptions filled. Analyses followed a causal inference approach-propensity scores modeled the probability of exclusive formula feeding; inverse propensity score weights were generated and applied to regression models to adjust for measured confounding. Analyses assessed findings' sensitivity to unmeasured confounding. Exclusive formula feeding during the birth-hospital stay was associated with increased odds of hospital readmission (OR 1.5; 95% CI 1.4-1.5) and increased odds of having a prescription filled (OR 1.2; 95% CI 1.1-1.2) during the first year of life. An exclusively formula fed infant, re-admitted to hospital during the first year of life, spent 2.5 days longer in hospital compared with a breastfed infant (p<0.001). An exclusively formula fed infant had 1.2 additional prescriptions filled during the first year of life compared with a breastfed infant (p<0.001). Sensitivity analyses suggested that after adjusting for several confounders (e.g., maternal age, SES, delivery method, gestational age, birth weight, urbanicity, parity) substantial unmeasured confounding would need to remain to nullify results. Exclusive formula feeding during the birth-hospital stay results in increased healthcare burden during the first year of life: hospital readmission, length of hospital stay, and prescription drug use. Policies that support breastfeeding mother-infant dyads (e.g., Baby Friendly Initiative) may both improve population health and led to reduced healthcare costs.

Co-Author(s): **Patricia J Martens**, Manitoba Centre for Health Policy, University of Manitoba; **Joykrishna Sarkar**, Manitoba Centre for Health Policy; **Carol Taylor**, Manitoba Centre for Health Policy

Concurrent Sessions B**Tuesday, May 13, 2014 | 2:30pm – 3:45pm****Séances simultanées****Le mardi 13 mai 2014 | 14 h 30 – 15 h 45****Panel Presentation**

Toronto Ballroom III (Convention Level)

Présentation en Panel

Toronto Ballroom III (Niveau « Convention »)

B1.1 Using National Frameworks for Local Policy Development: A Case Study of Child and Youth Mental Health in the Yukon

Presented by **GILLIAN MULVALE**, Assistant Professor, Health Policy and Management, DeGroote School of Business, McMaster University; **STAN KUTCHER**, Professor, Dalhousie University; **IWK Research Centre**

National frameworks are often developed to guide provincial/territorial policy-making in Canada. The Mental Health Commission of Canada sponsored the development of the Evergreen Child/Youth Mental Health Framework (Evergreen) to serve as a resource for policy advisors in provinces and territories in addressing the priority area of child/youth mental health. However, little is known about how helpful national frameworks are in practice. Some argue that national-level strategies may have limited utility for local policy-making, because they are not sensitive to specific local conditions that directly affect the health and well-being of residents of different communities, including remote and First Nations communities. The objective of this study is to assess the usefulness of Evergreen for local policy development in Canada by assessing its helpfulness in developing a comprehensive child and youth mental health framework in the Yukon Territory. A mixed methods case study is being carried out using community-based participatory policy research approaches. A 12-member Working Group comprised of representatives of Yukon Health and Social Services and Education departments, the Council of Yukon First Nations and Kwanlin Dun First Nation has ongoing involvement as an integral part of the study team. The study is divided into four phases: 1. Key informant interviews and focus groups among more than 82 participants including policy advisors, service providers, educators, politicians, youth service users and leaders, family members and First Nations leaders from across the Yukon and within the communities of Whitehorse and Haines Junction, Kwanlin Dun, Ta'an Kwachan, and Champagne and Ashihik First Nations to understand the salient characteristics of the Yukon context; 2. Literature review and key informant interviews based on comparator jurisdictions selected to collectively: (1) capture the identified salient characteristics and (2) demonstrate evidence-based innovations spanning each element of the Evergreen Framework; 3. The development of three proposals for a comprehensive framework for child and youth mental health in the Yukon; and 4. A policy dialogue among Yukon policy makers and stakeholders to select potential framework elements for the Yukon. The panel will highlight the salient characteristics of the Yukon context, the findings from other jurisdictions, key elements of the proposed options for the Yukon framework and the experience of policy advisors and First Nations leaders with respect to the research process and its importance for policy development. The panel will highlight multiple perspectives on the question of helpfulness of national frameworks for local policy-making in Canada, including health policy advisors, First Nations Leaders, and researchers. All elements of the research will be completed by the time of the conference except for the final policy dialogue, which will be held in Whitehorse, the week of May 26, 2014. The findings of this high priority area of policy development in Canada and assessment of utility of national frameworks at the local level is timely in light of the efforts underway by jurisdictions across the country to implement the recommendations of Canada's Mental Health Strategy, Changing Directions, Changing Lives.

Panel Presentation

Toronto Ballroom I (Convention Level)

Présentation en Panel

Toronto Ballroom I (Niveau « Convention »)

B2.1 QUALICO-PC in Canada, Australia, and New Zealand: Recruitment, Responses, and Initial Cross Country Comparison with Australia and New ZealandPresented by **SABRINA WONG**, Associate Professor, UBC; **ALAN KATZ**, Professor, Manitoba Health Policy Centre; **WALTER WODCHIS**, University of Toronto, HPME; **GARY TEARE**, Health Quality Council, Saskatchewan; **FRED BURGE**, Dalhousie

Overview This panel will provide comparative information on primary care performance across three countries: Canada, Australia, and New Zealand. Investigators from the Canadian arm of the QUALICO-PC study will present data and results based on collaborative research from these. Dr. Wodchis will introduce the QUALICO-PC research program, implementation and partnerships in Canada and internationally. Dr. Katz will report comparative information on the primary care practices, highlighting aspects of practice composition and accessibility of practices through practices such as extended hours. Dr. Wong will report on survey results of the differences and similarities in patient experience from the same practices as those reported in the physician practice surveys. Clinicians (Dr. Burge) and decision-makers (Mr. Teare) who participated in the Canadian QUALICO-PC arm will respond to the results. The panel, while reporting on comparative results, will also highlight the challenges of developing robust performance measurement in primary care and recruiting physicians to participate in surveys and in opportunities are made possible through international collaborative research efforts as exemplified by QUALICO-PC. Context: Performance measurement in primary care (PC) can be used to evaluate and identify opportunities for improvement at the practice and system level. QUALICO-PC evaluates the quality, equity and costs of primary care systems across 33 mostly European countries but also in Canada, Australia, and New Zealand. Design: Descriptive cross-sectional surveys of practices, providers, and patients. The three surveys were designed to be integrated in the analysis phase. Setting: In all countries, one provider per practice participated. Patients (n=10) from their participating provider were approached. Patients were > 18-90 years old, read English or French, and were not cognitively impaired. Providers administered the survey on a day representative of their practice. Recruitment of physicians was similarly low (<15%) across all three countries. Data collection yielded similar numbers of PC physician and practice surveys (n=678, n=173, n=168), patient experiences surveys (n=6099, n=1190, n=1150) and patient values surveys (n=648, n=133, n=103) from Canada, Australia, and New Zealand, respectively. Canada had the lowest percentage of practices using a family practice nurse, were less likely to receive any kind of quality improvement feedback or to segment their patient panels by age, diagnosis/risk factor, medications, or generate reminders from their electronic medical records. In Canada, an average panel size consists of 1,450 patients; 50% of practices have extended hours of service four times/week but 54% are not open on weekends. Compared to Australia and New Zealand, Canadian patients reported lower access to a PC physician on weekends or at night and had the longest waiting time for their last visit. Conclusions: Differences are likely due to the structure of the primary care systems. The findings from these three countries provide some insights into specific improvements that may address concerns raised about the Canadian primary care system.

Equity & Inequities

Jackson (Convention Level)

Équité et facteurs d'inégalité

Jackson (Niveau « Convention »)

B3.1 Strategies for Improved French Language Health Services; Perspectives from Family Physicians in Northeastern OntarioPresented by **ALAIN GAUTHIER**, Professeur adjoint, Université Laurentienne

Linguistic and cultural competence is an essential component of quality health care. Many have postulated that the poorer health of Francophones is in part due to inadequate French language health services. The purpose of the current presentation is to identify strategies to improve the quality of service for Francophone patients. A series of semi-structured key informant interviews were conducted with family physicians practicing in communities with a strong Francophone population. Physicians who had an active practice in Northeastern Ontario and had been practicing for a minimum of five years since the completion of their medical degree were approached. An iterative data collection-data analysis cycle was employed and data were analyzed using a detailed thematic approach. This included transcriptions being segmented into meaning units, meaning units were then sorted and presented as relative themes. Final results of the thematic analysis were then shared and contextually validated with two experienced practicing physicians. Using purposive and snowball sampling strategies, a total of 18 physicians were interviewed. Eleven physicians identified that they were competent enough to conduct their practice in French, 7 physicians were female and 8 physicians were located in rural northern Ontario. Respondents identified several strategies to ensuring adequate French language health services. These included strategies unique to English speaking physicians (e.g., use of appropriate interpreter services), French speaking physicians (e.g., aiming for same language continuity of care) and common strategies for all physicians practicing in French communities (e.g., hiring bilingual staff or having pamphlets and posters in both French and English). Family physicians in Northeastern Ontario's French speaking communities highlighted the importance of placing their practice with the social context of their patients. While linguistic and cultural patient-to-physician concordance is ideal, it may not always be possible. Thus, conscious efforts to attenuate communication barriers are necessary and several effective strategies exist.

Co-Author(s): **Patrick E. Timony**, Laurentian University-CRaNHR; **Suzanne I. Serresse**, Laurentian University-CRaNHR**B3.2 Social Housing and Health in Manitoba: A first look**Presented by **MARK SMITH**, Associate Director, Manitoba Centre for Health Policy

The objectives of this study were to acquire ten years of Social Housing data from the Manitoba Government, add it to the Repository housed at the Manitoba Centre for Health Policy (MCHP) and, through record linkage, compare outcomes on health and social indicators between residents and non-residents of social housing. Ten years of Social Housing data from the Manitoba Government were linked to multiple health, education and social service databases held in the repository at MCHP. Through a consultation process with stakeholders 19 indicators of health and social functioning were selected for analysis in 3 categories; Morbidity and Mortality, Children and Adolescents, and Healthcare Utilization and Screening. Comparisons were made between those within social housing and all other Manitobans not living in social housing. Descriptive statistics were produced and compared statistically. Logistic regression analyses were conducted to assess the influence of income and neighborhood level socio-economic status (SES) on outcomes. Not surprisingly, overall rates of premature mortality and morbidity (chronic disease and injury) were two to three times higher in the social housing population compared to individuals not in Social Housing from the same geographic region. Somewhat surprisingly, rates of screening (mammography, papanicolaou tests) and health care utilization (childhood immunization, continuity of care, complete physicals) were not as disparate with differences ranging from 0% to 70%. Logistic regression analyses found that individual income and neighborhood level SES, not health care utilization, significantly accounted for most of the differences in health and social functioning between the two groups. The results indicate that residents of social housing make use of the health care system to the same extent as individuals not in social housing, but their health outcomes are worse. SES appears to be the primary factor accounting for this difference. The policy implications of this research are discussed.

Co-Author(s): **Greg Finlayson**, MCHP; **Patricia Martens**, MCHP; **Jim Dunn**, McMaster University; **Heather Prior**, MCHP**B3.3 Addressing income security within primary health care**Presented by **ANDREW PINTO**, St. Michael's Hospital

Interventions to address social determinants of health, including income security, are rare in health care. The objective of this work is to identify the key mechanisms of successful interventions to improve income security and then apply them within our Family Health Team (FHT). We began by developing a conceptual framework, outlining how to address income security in primary health care settings. This framework was refined in consultation with experts from across the country. We conducted a systematic review of the literature to identify studies of interventions on income security, and synthesized findings using a realist lens. Mechanisms that contribute to success were assembled. These findings have informed the work of a health promoter, hired by the FHT to focus specifically on income security. We have received funding to carry out a two-year pragmatic randomized controlled trial to evaluate the impact of her work. Our conceptual framework identifies three key areas of action to improve income security: increase income (e.g. through improving access to benefits or through employment), reduce expenses (e.g. through obtaining cheaper housing) and improve financial literacy (e.g. through budgeting and establishing a bank account). Key mechanisms that underpin successful interventions in these areas include developing a trusting relationship between the patient, the health promoter and the provider; persistent effort over a sustained period of time; and focusing on the rights of the patient to a decent income. Our work to date has established a strong conceptual framework for interventions to improve income security, a key social determinant of health. The results of the planned IGNITE (addressing income security in primary care) Study will inform future work, including the feasibility of replicating such interventions in other settings.

Co-Author(s): **Danyaal Raza**, Harvard University; **Gary Bloch**, St. Michael's Hospital

B4.1 Asking Children with Cerebral Palsy about Pain: An Evidence Informed Approach to Establishing a Chronic Pain Assessment Toolbox

Presented by **ASHLEIGH TOWNLEY**, Knowledge Broker, Holland Bloorview Kids Rehabilitation Hospital

Chronic pain is under-recognized and under-treated among children with cerebral palsy (CP). The presence of cognitive, communication and motor impairments make accurate assessment difficult. Without proper assessment, pain cannot be effectively managed. The knowledge-to-action framework was applied to this evidence-to-practice gap to inform clinical practice in CP outpatient clinics. An integrated knowledge translation approach was adopted to engage knowledge users including researchers, clinical staff, youth, parents and decision-makers to develop a chronic pain assessment toolbox through consensus and critical appraisal of research evidence. A systematic review of pediatric chronic pain assessment tools was conducted. Tools were reviewed using a standardized approach to rate psychometric strength, clinical utility and suitability for assessing chronic pain in children with CP. Additional activities included a synthesis of existing pain assessment guidelines; generation of care recommendations and practice points; and development of a comprehensive knowledge translation and implementation plan to pilot the toolbox. The Registered Nurses Association of Ontario (RNAO) Pain Best Practice Guideline (BPG) was selected as a strong evidence-based guideline to serve as a framework to inform pain assessment recommendations for the CP population. With a lens towards children with CP, the chronic pain assessment toolbox consists of: pain assessment recommendations from the RNAO Pain BPG, practice points outlining care and pain assessment recommendations, and a compendium of eight tools to assess chronic pain interference. Multiple strategies including clinician education and champion leadership are being used to push the toolbox in clinical practice. Evaluation strategies such as audit and document review will provide insight on toolbox utility. Additional strategies including clinician interviews and a client/family survey will inform the impact of and satisfaction with the toolbox. Proper pain assessment is difficult without the right tools. Implementing a toolbox is a step towards leading the system in standardizing chronic pain assessment. Pilot outcomes will identify: the success of the adoption and uptake of the toolbox in these clinics; pain assessment practice changes; and impact on care.

Co-Author(s): **Ashleigh Townley**, Holland Bloorview Kids Rehabilitation Hospital; **Shauna Kingsnorth**, Holland Bloorview Kids Rehabilitation Hospital

B4.2 Implementing a quiet time intervention in a maternity ward: barriers, benefits and patient experience

Presented by **SAFINA ADATIA**, M.Sc. Candidate, McGill University

This study aims to: (1) explore patients' and healthcare professionals' perceptions of the potential benefits and consequences of a quiet time in a maternity ward, (2) study the barriers and enablers during implementation, and (3) measure the effects on patient and staff experiences and selected health-related outcomes. This study employs a mixed methods design. For the quantitative aspects, factors such as mood, blood pressure, amount of sleep, breastfeeding success and satisfaction will be measured pre and post intervention. The qualitative aspect will include semi-structured interviews with patients, their families and maternity ward staff. Data collection will occur over the course of one year. A participatory research (PR) approach will involve expectant mothers and hospital staff in the design and conduct of the research. The results of the evidence review and proposed methods will be presented. The literature review revealed that introducing a daily quiet time improves patient and staff satisfaction, and increases the likelihood of patients sleeping during that time. Measurements of noise levels post intervention demonstrated a significant difference in decibel level. These results have contributed to the design of this investigation. Therefore, we expect there will be significant, positive changes in the experiences and health-related outcomes of new mothers and staff on the maternity ward: e.g. reduced noise level; improved patient and staff experiences, better sleep, improved breastfeeding for patients, and decreased blood pressure in patients and staff. Qualitative interviews will provide insight regarding barriers and facilitators to change on a maternity ward and the perceptions of patients and staff of the environment pre and post intervention. The literature review demonstrated that implementing a quiet time results in increases in satisfaction, improvements in breastfeeding outcomes and patient care, and reductions in noise levels. This intervention will provide further insight into the effects of a quiet time and healthcare intervention implementation, which will guide us in future projects.

Co-Author(s): **Safina Adatia**, McGill University; **Susan Law**, McGill University

B4.3 Treatment of Preventable Dental Cavities in Preschoolers

Presented by **ADAM SHERK**, Senior Analyst, Canadian Institute for Health Information

Early Childhood Caries (ECC) is a preventable disease which affects children under six. This study, the first of its kind, illustrates the extent to which day surgery under general anesthesia is necessary due to severe progression of the disease and identifies populations at higher risk. Jurisdictions generally do not cover dental services within the healthcare system. However, when ECC progresses to an advanced stage, treatment under general anesthetic is often necessary in a hospital setting. A retrospective cohort study was conducted using the Canadian Institute for Health Information's administrative databases and Statistics Canada's census data to examine the number and costs of such surgeries. Population-based rates profiled regional rates of surgery and identified populations at higher risk of surgery such as Aboriginal communities. Hospital and physician costs were presented to quantify resource use. Travel times were calculated using postal code information to describe geographic access. There are 19,000 ECC-related day surgeries each year which cost Canadian hospitals \$21.2 million. Over one child in every hundred aged 1 to 4 will undergo an ECC-related procedure each year; these surgeries are the leading cause of day surgery for children in this group. The rate of surgery for ECC is nine times as high for children from neighbourhoods with a high concentration of Aboriginals, four times as high for children from the least affluent neighbourhoods and three times as high for rural children. Rates of hospitalization vary considerably between and within jurisdictions; in Nunavut these rates approach one in ten. A substantial portion of children receiving day surgery for ECC, 22%, lived two or more hours from their hospital of care. Preventable dental cavities in children take a considerable toll in terms of disease burden and cost, particularly for children at high risk - those living in high-Aboriginal and rural areas. The challenges of care delivery to these groups and financial coverage for dental care provide implications for policy and care organization.

Co-Author(s): **Anne McFarlane**, Canadian Institute for Health Information; **Brandon Wagar**, Canadian Institute for Health Information; **Maria Hewitt**, Canadian Institute for Health Information

B4.4 Trends in Glucocorticoid-Induced Osteoporosis Management Among Seniors in Ontario, 1997-2011

Presented by **JORDAN ALBAUM**, MSc Student, Leslie Dan Faculty of Pharmacy, University of Toronto

Glucocorticoid (GC) therapy is the most common cause of secondary osteoporosis. Since 1996, Canadian practice guidelines have recommended that all patients starting chronic oral GC therapy (≥ 3 months) receive bone mineral density (BMD) testing and/or osteoporosis treatment. We sought to examine trends in GC-induced osteoporosis management over time. We identified all community-dwelling chronic oral GC users aged 66 or older in Ontario using healthcare utilization data from 1997 to 2011. Chronic oral GC use was defined as ≥ 2 oral GC prescriptions dispensed and ≥ 450 mg prednisone equivalent over a 6-month period. Osteoporosis management by BMD test (sensitivity=98%, 95%CI=95.9-99.1; specificity=93%, 95%CI=89.9-95.4) and/or osteoporosis treatment within 6 months of starting chronic oral GC therapy was examined by sex and year. Results were summarized using descriptive statistics. We identified 75,621 male (mean age=74.7, SD=6.2) and 97,966 female (mean age=75.2, SD=6.4) patients on chronic oral GC therapy with over eighty percent receiving ≥ 675 mg within a 6-month window. The most common indications for chronic oral GC therapy were respiratory (28%) and rheumatic (15%) disease. Overall, 15% (7% BMD, 11% treatment) of men and 36% (13% BMD, 30% treatment) of women on chronic GC therapy received osteoporosis management. GC-induced osteoporosis management increased steadily from 7% (men) and 20% (women) in 1997, to a high of 21% (men) and 46% (women) in 2007, with little change from 2007 through to 2011. Rates of GC-induced osteoporosis management improved significantly over time in both sexes yet remain low, particularly among men. This represents a missed opportunity for fracture prevention among patients requiring prolonged GC therapy. Targeted interventions are needed to reduce the burden of fracture-related morbidity associated with GC-induced osteoporosis.

Co-Author(s): **Linda E Levesque**, Queens University; **Andrea S Gershon**, Sunnybrook Health Sciences Centre; **Yan Yun Liu**, Leslie Dan Faculty of Pharmacy, University of Toronto; **Suzanne M Cadarette**, Leslie Dan Faculty of Pharmacy, University of Toronto

B5.1 User-based and Government Operational Costs of Supportive Housing Versus Nursing Home Use: What's the Balance?

Presented by **GREG FINLAYSON**, Manitoba Centre for Health Policy

Governments have developed community-based supportive housing (SH) as an alternate to nursing homes (NHs) for some older adults, however the client-based and government operational costs for these types of care are unknown. Using these costs, we define the extent that SH is a viable financial alternative to NH care. Analyses were conducted at Manitoba Centre for Health Policy, on the population of new SH clients and NH residents in the Winnipeg Health Region (WHR) from April 1, 2006 to March 31, 2011. SH client costs were based on rent and service fees, and charges for prescription medications. NH resident costs were based on income-specific per diem charges (there is no charge for prescription drugs in Manitoba NHs). Operational costs were provided by the Manitoba government for each of the SH and NH programs. For all analyses SH clients were divided into reduced (rent-subsidized) and full-payment sub-groups. From interim analyses, 930 clients occupied 516 SH units during our study period, and 36.2% of these clients were rent-subsidized; 2,275 new residents were admitted to WHR NHs during this study. The median per diem cost to NH residents was \$1,203/month with an inter-quartile range of \$918-\$1,905. Client-based costs were similar for rent-subsidized SH clients (median of \$1,075/month) but much higher for full-payment SH clients (median of \$1,708/month), without yet calculating drug costs. Government operational costs were much higher for NHs (~\$45,000/bed annually) versus SH (~\$17,000/unit annually). Ongoing analysis will incorporate drug-related charges into client-based costs, and home care into SH government operational costs. Without yet considering drugs, user-based costs are similar only for rent-subsidized SH clients versus NH residents, suggesting that for many people SH may not be a financially viable alternative to NH care. Alternate client-based and government-operational payment strategies will be proposed after further analysis, to minimize client these payment differences.

Co-Author(s): **Greg Finlayson**, Manitoba Centre for Health Policy; **Greg Mason**, University of Manitoba; **Jennifer Schultz**, Manitoba Centre for Health Policy; **Marina Yogendran**, Manitoba Centre for Health Policy; **Malcolm Doupe**, University of Manitoba

B5.2 Understanding the Characteristics and Health Care Utilization Patterns of Palliative and End-of-Life Patients in Ontario Using Administrative Datasets

Presented by **SUMAN BUDHWANI**, PhD Student, HSPRN Trainee, Health System Performance Research Network, IHPME - University of Toronto

The objective of this research study was to use health administrative databases to identify palliative and end-of-life patients across acute and community health care settings in Ontario. The secondary objective of this study was to understand the health care utilization patterns of these patients. Differences between palliative and end-of-life patients were conceptualized. Administrative data from the Institute of Clinical and Evaluative Sciences (ICES) were used in prospective and retrospective cohort approaches to identify palliative and end-of-life patients. Patients were captured if they were either assessed or received care under the palliative care and/or end-of-life designation. Various settings were examined, including hospitals, long-term care homes, and patient homes. Following identification, patterns of health care utilization and costs for all identified patients were analyzed. Almost 76% of all individuals who died in Ontario over a two year time period had at least one indication of receiving palliative care. 30% of these patients were also designated as end-of-life in available administrative data. Almost 71% of Ontarians died in a hospital or long-term care home, with Ontarians spending on average about 2 weeks of their last 90 days in the hospital. Almost 60% of costs incurred in the last 3 months of life were a result of inpatient services. The proportions of those receiving palliative care, those designated as end-of-life, those who had both statuses, and those had neither were generally similar across Ontario's health regions. This study delineated the characteristics, health care utilization, and costs of palliative and end-of-life patients across health care settings in Ontario. The findings of this study will allow policy makers to gain the background information that is foundational to efforts in improving the quality of care for these patients.

Co-Author(s): **Walter Wodchis**, Health System Performance Research Network, IHPME - University of Toronto; **Peter Tanuseputro**, Health System Performance Research Network, Ottawa Hospital Research Institute - University of Ottawa; **Yu Qing Bai**, Health System Performance Research Network

B5.3 Primary care continuity among frail older adults

Presented by **SUSAN BRONSKILL**, Scientist, Institute for Clinical Evaluative Sciences (ICES)

The provision of coordinated and integrated care to frail older adults - in the appropriate setting - is important. This study examined the extent to which older adults who had high continuity in primary care physician visits differed from those with low continuity upon admission to long-stay home care services. Population-based, administrative databases identified 25,942 adults aged ≥ 66 years who were newly admitted to long-stay home care in Ontario between April 1, 2011 and March 31, 2012. Continuity of primary care was measured using the Usual Provider Continuity (UPC) index measured over two years. Individuals with high continuity (UPC index ≥ 0.75) were compared to those with low continuity based on demographic characteristics (age, sex, area-level income), clinical factors (diagnoses, comorbidity), functional status (activities of daily living (ADL), cognition) and health system use (acute care hospitalizations, emergency department visits, medication use) using descriptive statistics and multivariable models. 14,193 (54.7%) of new long-stay home care clients had high continuity of primary care. Individuals with low continuity were demographically similar to those with high continuity (32.5% vs. 34.6% were 85+ years old; 59.7% vs. 59.9% were female) and were functionally similar (41.5% vs. 41.7% had problems with ADLs; 16.2% vs. 18.6% had high cognitive impairment). Individuals with low UPC indices had more comorbidity than those with high UPC (29.8% vs. 21.3% had Charlson score of 3+; 35.7% vs. 20.6% were considered frail). They also used more health services including emergency departments (84.9% vs. 69.6% with visits) and polypharmacy (24.6% vs. 19.2% used 20+ medications concurrently). High UPC individuals had more primary care physician visits. These patterns of health system use persisted after risk-adjustment. This study presents a complex picture of factors associated with variations in continuity of primary care across a group of frail older adults. There is some suggestion, however, that high continuity of primary care reduces use of other health services in these vulnerable home care clients.

Co-Author(s): **Sima Ghandhi**, Institute for Clinical Evaluative Sciences; **Liisa Jaakkimainen**, Sunnybrook Research Institute

B5.4 Examining Variation in Access to Post-Acute Home Care Services

Presented by **ERIN PATTERSON**, PhD Student, University of Toronto; **MARGARET SAARI**, PhD Student, University of Toronto

The purpose of this presentation is to highlight the results of a study examining how access to post-acute home care services varies across the Province of Ontario by region as well as to understand which factors influence access to post-acute home care services in Ontario. Using administrative health care data collected between April 2009 and March 2012, secondary analysis was carried out with 40,416 cases. Cases were included if the individual received at least one home care visit from any home care service provider and if the case was included in one of the top 20 case mix groups. Least squares regression analysis was used to determine which factors influence the intensity of home care nursing services received by post-acute home care clients across Ontario. Independent variables were selected for inclusion in the regression based on a review of related literature. The model explained 22.8% of variance in intensity of home care nursing services received. Significant predictors ($P < 0.05$) of intensity of nursing services received included: region in which care was received, assigned case mix group, home care admission month and year, living arrangement, increasing age, residing in long-term care and receiving other types of home care services. Compared to the Toronto Central region of Ontario, home care clients in all other regions received significantly fewer nursing visits. Additionally, clients admitted to home care between November and March (the last 5 months of the fiscal year), received significantly fewer nursing visits than those admitted to home care in April. These findings suggest that variation in access to home care services exists in Ontario and that despite the availability of publically funded home care services, access remains an issue. Understanding factors influencing access can inform the creation of targeted strategies and policies to address inequities in access across Ontario.

Co-Author(s): **Ann Tourangeau**, Lawrence S. Bloomberg Faculty of Nursing, University of Toronto; **Margaret Saari**, Lawrence S. Bloomberg Faculty of Nursing, University of Toronto

B6.1 Researching Leadership Gaps in Decentralized and Distributed Health Systems

Presented by **GREGORY MARCHILDON**, Professor and Canada Research Chair, **JOHNSON-SHOYAMA** Graduate School of Public Policy

This paper presents the results from the first systematic research projects on health system leadership in Canada. In particular, this paper focuses on the leadership qualities and behaviours that facilitate systems thinking, perhaps the least understood attribute of effective leadership in highly decentralized and distributed health systems. This paper presents new evidence from a four-year, pan-Canadian study of leadership in health system redesign. Leadership behaviours were identified and examined in six case studies. Each case study used a longitudinal Participatory Action Research (PAR) methodology to explore changes in leadership over the course of a restructuring initiative. The case studies used mixed qualitative methods, primarily interviews and focus groups with health leaders, to identify the leadership behaviours most conducive to long-term system transformation. All case study data were subjected to cross-case analysis using NVivo software to identify the most significant trends and themes in leadership across the country. Systems thinking emerged as a key attribute for successful leadership in all case studies. Leaders expressed the importance of seeing their roles and actions as part of a broader and multi-dimensional system; this was often described as 'big picture' thinking. The most effective leaders perceived the health system as a whole and were willing to spearhead and sustain collaboration (through networks and other non-hierarchical structures) for the sustainability of the system, rather than focusing solely on goals within their own organizations. The shift toward systems thinking is exemplified by the growing importance of multi-stakeholder networks motivated by influence and interest rather than by a specific mandate or directive. Systems thinking and networking are particularly important leadership attributes in Canada's increasingly decentralized and distributed health system. However, in the absence of a better understanding of systems thinking and the importance of systems networking, it has been difficult for decision-makers to incorporate these attributes in current leadership frameworks, training content and performance evaluation.

Co-Author(s): **Amber Fletcher**, Johnson-Shoyama Graduate School of Public Policy, University of Regina

B6.2 Comparing the Canadian Health System Internationally

Presented by **CHELSEA TAYLOR**, Program Lead, Canadian Institute for Health Information; **OLGA KRYLOVA**, Senior Analyst, Canadian Institute for Health Information

The quality of healthcare is of paramount importance to Canadians. International comparison of quality of care may suggest service gaps among countries. Using data from the Organisation for Economic Co-operation and Development (OECD), we compared Canada's health system with its peers on 19 indicators of quality of care. The 19 quality of care indicators were analysed to illustrate the burden of disease, highlight best performers and possible ways of improvement. By using data from the OECD, Canadian Institute for Health Information (CIHI) and Statistics Canada, we were able to compare national and provincial results to those of the OECD countries. We normalized the indicator rates, and compared them to the OECD average, 25th and 75th percentiles. To enable province-to-country comparisons, we calculated provincial indicators using the OECD methodology. We developed an interactive web display for easy and convenient use of the data. Our results show that countries vary considerably on the 19 indicators. No individual country has better performance than Canada across all dimensions. In some areas, such as avoidable admissions and influenza vaccinations in seniors, Canada performs very well. In other areas, such as patient safety in the acute care setting, Canada falls behind most other OECD countries. This, however, may be partially explained by differences in recording methods. Comparing the Canadian provinces shows that, for some indicators (e.g., avoidable admissions of asthma), there is little variability. Whereas for others (e.g., cervical cancer mortality), the variability is relatively large, and some provinces may more closely resemble other countries than other provinces. The additional context can help inform information sharing and improvement for health care systems. Various international and national data sources have been brought together to provide a comprehensive view of the state of our health care system. This analysis provides useful information for healthcare leaders to keep improving the Canadian health care system and to collaborate with policy makers within and outside of Canada.

Co-Author(s): **Mark McPherson**, Canadian Institute for Health Information; **Olga Krylova**, Canadian Institute for Health Information; **Jennifer D'Silva**, Canadian Institute for Health Information; **Katerina Gapanenko**, Canadian Institute for Health Information

B6.3 Academic Entrepreneurship in the Health Sciences: An Institutional Work Approach

Presented by **RENATA AXLER**, PhD Candidate, University of Toronto

Academic research commercialization and industry collaborations have been a focus of health and scientific innovation policies. These initiatives have been both lauded for their ability to generate marketable health products, and cautioned against for the potential industrial overtake of research. We study how publicly-funded academic biomedical scientists navigate these initiatives. To explore the management and implications of biomedical research commercialization, we conducted 38 in-depth semi-structured qualitative interviews with CIHR-funded basic biomedical scientists engaged in these activities. Interviews examined scientists' motivations to engage in commercialization activities, their organization of these activities in academic laboratories, and their understandings and management of conflicts of interest in health research. Analyses drew from an institutional work perspective, examining the maintenance or change of normative and practical institutions in academic science. We examine how academic health scientists justify, organize, and work to institutionalize the activities of commercial science in academic health research settings. Entrepreneurial scientists generated positive normative value in entrepreneurial activities for their ability to enhance scientific practices through access to financial and intellectual resources; they also valued the potential for these activities to generate downstream clinical, economic, and social impacts. Scientists employed various strategies to manage and organize these activities in their academic laboratories, and claimed an important distinction between many of these activities and appropriate academic trainee development. Throughout, scientists simultaneously appealed to the importance of adherence to academic norms like researcher autonomy, freedom and control, and scientific disinterestedness in their navigation of entrepreneurial practices. They denied their own involvement in any potential conflicts of interest, despite their various interactions with commercial science. As academic biomedical scientists increasingly engage in research commercialization activities, they legitimize these as credible and academically-aligned pursuits. However, these initiatives can have harmful consequences in the biomedical sciences, where upstream developments may impact medical evidence and patient care. There is a need to scrutinize and regulate these activities.

Co-Author(s): **Fiona Miller**, University of Toronto; **Pascale Lehoux**, Université de Montréal; **Trudo Lemmens**, University of Toronto

B6.4 Territorialité, communautés et santé : Défis liés à la reconfiguration des établissements de santé au Québec

Presented by **ELISABETH MARTIN**, Professeure adjointe, Université Laval

L'intégration de la gouvernance constitue l'une des options de politiques pour réorienter les systèmes et les services de santé autour de la 1^{re} ligne. L'objectif de cette recherche est de montrer comment et sous quelles conditions s'est implantée une réforme visant à instaurer des fusions d'établissements de santé au Québec. Cette recherche doctorale étudie la mise en œuvre locale de la réforme de 2004 fusionnant, dans des territoires donnés, les établissements hospitaliers, communautaires et de soins de longue durée pour créer les Centres de santé et de services sociaux (CSSS). À l'aide d'un cadre d'analyse issu de l'économie politique, des études de cas ont été menées dans six territoires de deux régions (Bas-Saint-Laurent et Chaudière-Appalaches), et ce, en s'appuyant sur une analyse documentaire approfondie et la réalisation de 32 entretiens semi-dirigés. Le découpage des délimitations territoriales des CSSS a constitué un des enjeux conflictuels de la mise en œuvre de la réforme. Diverses logiques ont dû être réconciliées dans le découpage sociosanitaire: des préoccupations liées à l'instauration d'une organisation de services efficiente et des considérations liées à la préservation des dynamiques communautaires existantes. Les choix territoriaux, différents selon les régions étudiées, ont directement conditionné le positionnement des acteurs face aux fusions d'établissements proposées. D'abord, une menace perçue à la territorialité vécue a fait l'objet de contestations dans certaines communautés locales. Ensuite, les acteurs sanitaires et politiques locaux ont consenti plus facilement aux fusions d'établissements lorsque les limites territoriales prévues pour le CSSS correspondaient à celles des municipalités régionales de comté (MRC). La recherche conclut au caractère institutionnalisé des MRC comme référentiel historique et contemporain d'organisation des services de santé au Québec. Plus largement, elle met en lumière la nature proprement politique de la mise en œuvre locale de la réforme, les conflits étant arbitrés au moyen de négociations et de compromis.

B7.1 A longitudinal analysis of nurse retention in Ontario (2003-2010): Recommendation for policy and practice

Presented by **MOHAMAD ALAMEDDINE**, Assistant Professor, American University of Beirut

Retention of nurses provides both continuity of care and cost efficiencies associated with investment in orientation and productivity. Using the concept of “stickiness” (probability of remaining employed in same “setting” over time), comparisons are made by sub-sector, nurse group and work status to guide evidence based policy and practice recommendations. Using the College of Nurses of Ontario (CNO) registration database for years 2004-2010, we linked nurses’ yearly registration records to create a longitudinal database of nursing employment (with careful attention to ensuring individual nurses would not be identifiable). The resulting database was used to compute a 2-year “stickiness” series (probability that a nurse working in a particular “setting” in year t was still working there in year t+2). Analysis was carried out by sector/sub-sector of employment, nurse group and work status. Nursing workforce retention trends were linked to key policy and practice decisions implemented during the period of analysis. When setting is defined as sector, the hospital sector consistently displayed the highest 2-year stickiness figures (90-92%). Despite efforts to shift care from hospitals to home and community, the community sector consistently displayed lower stickiness figures (74-76%). Breaking these into sub-sectors, the highest stickiness was found in Acute Hospitals (82-87%), Psychiatric hospitals (76-80%), Public Health (85-87%) and Community Care Access Centers (76-81%). A wide variation in the stickiness of community sub-sectors of employment was noted, with those sub-sectors involving direct patient care and community visitation displaying relatively lower stickiness figures (e.g. Community health organizations stickiness ranged from 41-48%). Sub-sector stickiness was higher for full-time (vs. part time/casual) employment, and for Registered Nurses (vs. Registered Practical Nurses). Despite the rhetoric of an active shift of care to the community, the hospital sector displayed the highest nurse retention rates. The success of policies encouraging home and community care require Improving nurse retention in community sub-sectors through an examination of working conditions and human resources management practices (especially full-time/part-time employment).

Co-Author(s): **Andrea Baumann**, McMaster University; **Raisa Deber**, University of Toronto; **Audrey Laporte**, University of Toronto

B7.2 Knowledge Synthesis of Internationally Educated Health Professionals in Canada: Gap Analysis and Recommendations for Research

Presented by **CHRISTINE COVELL**, University of Ottawa

We will present the findings from the Canadian Health Human Resources Network knowledge synthesis about Internationally Educated Health Professionals (IEHPs) in Canada. We will focus on the gaps in evidence and identify areas that require further research. We used an expansion on Arksey and O'Malley's six step process for scoping review methodology. Guided by a set of key words developed by our research team, we searched relevant academic and grey literature published in English and French from 2000-2012 using electronic databases, government, professional, and immigrant association websites. We also reviewed literature suggested by teleconference participants and performed bibliographic review of the identified grey and academic literature. A total of 410 sources were retained and used in the synthesis. Throughout, stakeholders from academia, government and professional organizations provided feedback which we used to refine the synthesis and validate the findings. Medicine and Nursing dominate the literature on IEHPs in Canada. Methodologically, approximately one-quarter of the papers are empirical with majority being reports generated by nongovernmental organizations. Six key themes were identified in the literature: pre-immigration activities and programs, early arrival activities and programs, credential recognition and professional recertification, bridging and residency training programs, alternative paths to integration and workplace integration. Gaps include the absence of comparative approach among professional groups and for bridging and residency program models. Research on alternative paths to professional integration, transitioning to other healthcare professions and the role of employers in facilitating workplace integration is lacking. Data systems to track IEHP's adaptation and integration in Canada are limited. Recommendations for future research include exploring the relationship between professional and socio-cultural integration of IEHPs, especially those in rural and remote areas; providing evidence for developing and evaluating bridging program initiatives, and examining the long-term practice and integration of IEHPs. Research with an inter-professional focus and larger samples is warranted.

Co-Author(s): **Elena Neiterman**, University of Toronto; **Ivy Bourgeault**, University of Ottawa

B7.3 Towards a more nuanced understanding of health profession organizations as interest groups in health policymaking

Presented by **SARAH BOESVELD**, Health Policy PhD Program, McMaster University

Little research has been carried out focusing on interest groups, which act to shape policy, within the health domain. The aim of this review is to develop better understanding of health profession organizations as interest groups, by mapping literature that applies interest group theory to the involvement of health profession organizations in health policy issues and debates. We undertook a qualitative thematic analysis of published literature describing the role of health professions as interest groups in the context of health policymaking. Literature was identified through a computerized search of relevant databases using pilot-tested keywords ('health policy' OR 'public policy' AND 'interest group'; 'profession' AND 'health poli'), followed by double-sided snowball searching of works cited and citing. Inclusion criteria were: articles were published in English, and focused on the activities of one or more health profession organization around a health policy issue or debate. Data analysis currently underway. The included literature is being mapped as a collection, to describe the work being carried out in the health policy domain and make links between theoretical interest group literature and applied health policy literature. A second phase of the analysis involves the selection and detailed thematic analysis of a subset of this collection, drawing on the articles that are most helpful to extract key messages about i) how the health profession organization behaved around a particular policy issue, ii) what this tells us about how interest groups behave and what their roles are in policymaking processes, and iii) theoretical conclusions or contributions the authors make. This work considers the nuances of one kind of interest group in the health domain -- health profession organizations -- and draws attention to the relationships these groups have with other stakeholders, their roles and goals, and how interest group theory has been applied to the reporting of health profession organizations in health policy literature.

B7.4 The Enhancement of the Scopes of Pharmacists' Practice: A Comparative Analysis of the Regulatory Frameworks in Saskatchewan and Ontario

Presented by **OLENA KAPRAL**, PhD (Student), Johnson-Shoyama Graduate School of Public Policy

This study aims to determine how the regulatory frameworks governing Canadian health providers impact the enhancement of scopes of practice. Various provinces have enhanced the scopes of pharmacists' practice to facilitate collaborative care among health providers, offering researchers an opportunity to understand how existing institutions can influence health reform initiatives. A comparative case study design was used to establish a narrative of the events that influenced the decision to enhance the scope of pharmacists' practice in Saskatchewan and Ontario. These provinces have implemented different regulatory frameworks and have committed to support team-based care; these case studies provide an optimal point of comparison for this study. The case studies were explored using (1) archival material and (2) discourse analysis of government documents. The publicly-available documents were collected from relevant websites and online archives, including the provincial legislative assemblies, the ministries of health, regulatory bodies, and professional associations. The similarities and differences of the regulatory frameworks implemented in Saskatchewan and Ontario will be discussed. The differences were influenced by the purpose and nature of each regulatory framework, as well as the different health needs in each province. As such, there is a divergence in the policies that shape the regulatory frameworks but they have produced fairly similar scopes of pharmacists' practice in Saskatchewan and Ontario. While enlarged scopes of practice have allowed pharmacists in both provinces to be more responsive to their patients' needs, there is limited evidence to suggest that it has facilitated collaborative care. Instead, the differences in the scopes of pharmacists' practice within different provinces threaten the universality of Canada's healthcare system. A deeper understanding of the purpose and nature of the regulatory frameworks will enhance the ability of provincial governments to achieve desired policy objectives, from increasing scopes of practice to facilitating more collaborative care.

Panel Presentation

Tom Thompson (Convention Level)

Présentation en Panel

Tom Thompson (Niveau « Convention »)

B8 How Can We Strengthen Researcher-Research User Collaboration to Improve Health Service Planning, Delivery, Evaluation and Improvement?

Presented by **R. SACHA BHATIA**, Director, Institute for Health System Solutions & Virtual Care at Women's College Hospital, clinical and research fellow in cardiology at Massachusetts General Hospital, Research Fellow at Harvard University; **BRONWYN DAVIES**, Executive Director, Community Health Services, Department of Health in New Brunswick; Carole A Estabrooks, Professor, Faculty of Nursing, University of Alberta in Edmonton, Canada Research Chair (Tier 1) in Knowledge Translation; **DIANE FINEGOOD**, President & CEO, Michael Smith Foundation for Health Research; **SEAN KIDD**, Clinical Psychologist and Head of Psychological Services, Toronto Centre for Addiction and Mental Health Schizophrenia Division, Assistant Professor, Department of Psychiatry, University of Toronto; **ANITA KOTHARI**, Associate Professor, Faculty of Health Sciences, Western University

A select panel of researchers and research users will share their experiences and insight about collaboration (integrated knowledge translation-IKT), and as a group we will consider needs and preferences for IKT support that will inform ongoing CHIPS Theme Group activities.

Concurrent Sessions C

Wednesday, May 14, 2014 | 11:00am – 12:15pm

Séances simultanées C

Le mercredi 14 mai 2014 | 11 h 00 – 12 h 15

Panel Presentation

Toronto Ballroom III (Convention Level)

Présentation en Panel

Toronto Ballroom III (Niveau « Convention »)

C1.1 PATHS Equity for Children: A Program of Research for Understanding What Works for Children

Presented by **MARNI BROWNELL**, Associate Professor/Senior Research Scientist, University of Manitoba/Manitoba Centre for Health Policy; **PATRICIA MARTENS**, Manitoba Centre for Health Policy, University of Manitoba; **ALAN KATZ**, Manitoba Centre for Health Policy, University of Manitoba; **DAN CHATEAU**, Manitoba Centre for Health Policy, University of Manitoba; **NATHAN NICKEL**, Manitoba Centre for Health Policy, University of Manitoba

Health inequity is unfair and avoidable or remediable differences in health among social groups. Reducing health inequities and improving overall health status have been the goals of initiatives developed at international and provincial levels. In keeping with these initiatives, the PATHS Equity for Children (PAthways To Health and Social Equity) program of research was developed at the Manitoba Centre for Health Policy (MCHP), focused on creating a population-based capacity for understanding what works to reduce inequity in outcomes for children. The purpose of this panel presentation is to provide a comprehensive description of the PATHS program of research, how the components of the program relate to each other, and sharing lessons learned and expertise on: 1) implementing an integrative knowledge translation (KT) approach to a program of research; 2) the development of a multi-year analytic cohort using administrative data; 3) using cutting edge population-based methodologies to measure program effects and changes in equity over time. Examples of specific evaluations will tie this information together. Drs. Patricia Martens and Alan Katz will introduce this panel session by providing an overview of the PATHS program, including a description of the collaboration between research scientists, deputy ministers and senior policy analysts from provincial government departments, stakeholders from Manitoba regional health authorities and NGOs. They will also present an overview of the Population Health Research Data Repository housed at MCHP, which provides scientists with a unique and powerful ability to investigate pathways to children's health and social equity and evaluate the effects of various health and social programs and policy interventions. Dr. Dan Chateau will then describe how data in the Repository have been used to develop the PATHS dataset, which contains records on 584,255 individuals born between 1984 and 2012, and is used in analyses for all the specific evaluations within the PATHS program of research. Covariates and outcome variables are available from multiple government agencies, and include information from health, education, housing, income assistance and family services. Dr. Nathan Nickel will discuss applying causal inference methodologies within the context of evaluation research focused on health equity. Specifically, Dr. Nickel will briefly cover methods for estimating counterfactuals, demonstrate how to assess the sensitivity of results to unmeasured confounding, and illustrate the application of health equity measures such as the Kakwani Progressivity Index. Drs. Patricia Martens and Marni Brownell will then tie this information together by providing examples of findings from specific PATHS projects including: an evaluation of the effects of full-day kindergarten on children's long-term academic outcomes and its impact on equity; the impact of a prenatal income supplement on infant health and health equity; and, the effect of 'place' on health and education outcomes for children and youths living in social housing. This panel presentation will underscore the value of using linked administrative and program data from various sources for program evaluation.

Panel Presentation

Tom Thompson (Convention Level)

Présentation en Panel

Tom Thompson (Niveau « Convention »)

C2.1 Meet the editors - How to publish about health services and policy research in Canada

Presented by **MICHEL GRIGNON**, Associate Professor, McMaster University; **J.C HERBERT EMERY**, Professor, University of Calgary; **MARGARET J PENNING**, Professor, University of Victoria; **JENNIFER ZELMER**, Executive Vice President, Canada Health Infoway

Background: Researchers and research users in the field of health services and policy (HS&P) are faced with an increasing, potentially overwhelming, volume of research being published. Keeping abreast and making sense of this research presents a major challenge and is becoming more and more complex, as is knowing how to reach the right audience in publishing their own work. In Canada alone, research in HS&P can appear in many journals or outlets, each with its own niche but also with overlap with other journals. This panel gathers the editors of the five main Canadian journals in the field of HS&P: Canadian Public Policy (Herb Emery, confirmed); CPP/AdP publishes in all areas of public policy, not only health policy, but health is a strong component of public policy in Canada); Canadian Journal on Aging (Margaret Penning, confirmed); Healthcare Policy (Jennifer Zelmer, confirmed); Health Reform Observer (Michel Grignon, confirmed); and Canadian Medical Association Journal (John Fletcher, Editor-in-Chief has been invited, to be confirmed). Jennifer Zelmer and Michel Grignon provide links to international publications: Zelmer sits on the editorial board of the International Journal for Quality in Health Care and Grignon liaises with the European Observatory on Health Systems and Policies' 'Health Systems and Policy Monitor' platform, which provides opportunities to reach an international audience (HSPM has an agreement with Health Policy to publish some of its best comparative analytic pieces). The panel will discuss the state of publication (current and anticipated) in Canada, and will help potential authors reach their target audience. The following questions will be discussed: Where should a Canadian researcher in HS&P research send their manuscript in order to reach a specific (academic, professional, managerial, policy-maker) Canadian readership? How can they write their paper with a specific journal in mind? What are the specificities and overlapping areas of the main journals publishing in the field in Canada? Is it possible to reach an international audience by publishing in a Canadian journal? Are journal publications relevant tools for knowledge translation and what is the future of publication in the area of HS&P in Canada? What kind of business model exists in the field in Canada? Are reviewers paid? Who supports journals financially? Do authors pay to publish? Are impact factors measured and what do they mean? What databases reference articles and what does it mean? What kind of business model should exist (ideally)? Structure: Following a short (5 minute) presentation by each of the journals' editors (target audience, type of papers, vision for the future, their take on the questions listed above) (25 minutes in total), we will have 25 minutes of discussion about overlaps and unique niches among the journals, then a 25- to 35-minute open discussion about these issues (and other questions participants wish to raise). Impact: This session will help users and producers of research in the field get a better picture of the publication landscape and will start a discussion about the future of publication on health services and policy research in Canada.

Health Informatics and e-Health

Jackson (Convention Level)

Informatique en santé / cyber santé

Jackson (Niveau « Convention »)

C3.1 Formation of disease registries in a large Family Health Team (FHT): a Canadian Primary Care Sentinel Surveillance Network (CPCSSN) project

Presented by **MICHELLE GREIVER**, Network Director, CPCSSN - UTOPIAN network

Registries benefit from standardized data to indicate the presence of conditions. Standardized coding for chronic diseases may not be present in Electronic Medical Records (EMRs). This can impede quality improvement efforts that rely on registries for denominators. We implemented team-based methods to standardize chronic disease coding in primary care EMRs. 59 North York FHT family physicians participated. We provided reporting software, the Data Presentation Tool (DPT) to the FHT's data manager. DPT uses EMR data that has been cleaned, merged and standardized by CPCSSN, and Health Profile free text encoded in SNOMED-CT. These improved data are returned to the FHT in the DPT. We used DPT to discover discrepancies between agreed upon coded entries in Health Profiles for five chronic diseases (diabetes-ICD9 250, COPD-496, hypertension-401, dementia-290, heart failure-428) and validated CPCSSN algorithms or SNOMED-CT terms. After physician verification of discrepant data, data entry clerks re-entered coded data in the EMRs. 43% of patients with possible heart failure, 19% with diabetes, 37% with hypertension, 83% with COPD and 71% with dementia as indicated by CPCSSN algorithms or SNOMED-CT (for heart failure) did not have standard agreed upon codes in their Health Profile. Between 83% and 93% of physicians returned verified lists for each condition. 72% of the data were verified by the physicians. 51% of possible conditions were indicated as being positive for the condition queried. 10,708 health conditions already had standard codes and 2,397 new codes were added, for an increase in standardized coding of 22%. An analysis comparing the changes in a cohort not exposed to DPT is under way. Key informants stressed the value of having data to monitor quality for chronic conditions. Registries are foundational to quality improvement efforts targeting specific conditions. We demonstrated the feasibility of increasing data standardization to form disease registries for a large primary care team. This may be feasible in other primary care settings with access to cleaned data and reporting software such as DPT.

Co-Author(s): **Dave Jackson**, CPCSSN; **Ken Martin**, CPCSSN; **Marjan Moeinedin**, North York Family Health Team; **Anita Lambert-Lanning**, CPCSSN

C3.2 Impact of patient's online access to laboratory results in British Columbia: primary care utilization and patient self-management

Presented by **CHAD LEAVER**, Benefits Realization Leader, Canada Health Infoway

In Canada, British Columbia (BC) is at the forefront of consumer digital health technologies such as providing patients online access to their laboratory results. We sought to assess how patient access to lab results impacts utilization of primary care services and patient self-management. We conducted online surveys of BC residents between: November 27- December 17, 2013. The intervention cohort (patients who viewed their lab result(s) online in the past year) was recruited through a provider of online test results; and the comparison cohort (patients having a lab test in the past year, but did not view results online) through a general population research panel. Data were analyzed using descriptive statistics. A total of 2,047 surveys were completed by BC residents that viewed lab results online in the past year; and 1,245 residents completed the comparison cohort survey (18% vs. 45% response rates respectively). Among those who viewed their results online, 89% report that online access has changed how they manage their health. Viewing the most recent lab result online was significantly associated ($p < .05$) with: knowing the result of one's most recent test, waiting only a few days for the result; and being less likely to contact their doctor while waiting. While both groups reported relatively low anxiety before/after knowing test results (average < 30 on a scale 0-100), anxiety was higher in both cases for those who viewed results online. Canadians are beginning to have electronic access to their health information. Online access to laboratory results is timelier, does not appear to contribute to contact burden with regular place of care and supports self-management. Understanding the effects for patients and health system utilization may help shape emerging consumer health solutions.

Co-Author(s): **Simon Hagens**, Canada Health Infoway-Inforoute Santé du Canada; **Heather SmithFowler**, Société de recherche sociale et appliquée/Social Research and Demonstration Corporation; **Jennifer Zelmer**, Canada Health Infoway-Inforoute Santé du Canada

C3.3 Evaluation of the Quebec e-prescribing Health Record medication functions - potential benefits and barriers to its realization according to early adopters

Presented by **AUDE MOTULSKY**, Post-doctoral fellow, Clinical and Health Informatics Research Group, McGill University

The web based Quebec e-Health Record (QeHR) is being implemented in pilot regions of Quebec since 2011. The objective of this study was to evaluate the impact of the medication related functions of the QeHR used by primary care physicians and pharmacists in the pilot regions (Quebec City and Lanaudière). The data collection consisted of 80 interviews with physicians (12), managers (5), pharmacists (63), and pharmacy technicians (5), who were identified as highest users of the QHR (from utilization data retrieved from the Régie de l'assurance maladie du Québec). The interviews were completed with think-aloud observation of specific tasks associated with the e-prescribing functions of the QeHR. We classified the perceived benefits per each step in the medication management process. Moreover, we identified barriers to the actualization of the promised benefits of the QeHR, according to these early users of the technology. Two functions were critical to QeHR-connected clinicians. First, the creation of a central medication history, accessible for physicians and pharmacists, was perceived as leading to an improved medication review, and improved productivity of the prescriber. These potential benefits were impaired by poor integration of medication data into the local systems of the pharmacist and the physician. Second, the electronic transmission of the prescription was perceived as leading to a prescription that is easier to retrieve (for the physician) and to execute (for the pharmacist). But the length of the validation process the requirement for a printed prescription, and the current execution process in pharmacies impaired these benefits. Overall, most of the potential benefits were impaired by an incomplete application, allowing only for partial data management. In our study, most of the interviewed clinicians continued to work in the local mode, using the QeHR functions only in specific cases (e.g. suspected abuse) because of technological limitations. The potential benefits associated with the QeHR are highly impaired by a partial and unsystematic use of the technology.

Co-Author(s): **Claude Sicotte**, Université de Montréal; **Marie-Pierre Gagnon**, Université Laval; **Christian Rochefort**, McGill University; **Robyn Tamblyn**, McGill University

C3.4 Impact of using electronic records in family physician/general practitioner practices

Presented by **ARTEM SAFAROV**, Manager, Health Policy and Government Relations, College of Family Physicians of Canada

This study aimed to measure the self-reported effect that the implementation of electronic records had on family physician and general practitioner practices. The study further explored how several characteristics of practices (such as length of time using electronic records) impacted the effect of using new technology. The information for the study was collected as part of the 2013 National Physician Survey (NPS). The 2013 survey collected information from over 10,000 physicians in spring of 2013. The data was weighted on several key population variables (age, sex, province, broad specialty). For this study the following questions were used: -Use of electronic records to enter/retrieve patient information -Perceived impact of adopting electronic records on the productivity of the medical practice -Perceived impact of adopting electronic records on the quality of the patient care provided -Time elapsed since adopting electronic records The adoption of electronic records by Canadian family physicians and general practitioners (FP/GPs) is approaching critical mass. It has increased from 16% in 2004 to 64% in 2013. The adoption of electronic records has a definitive positive effect on quality of care provided as 63% of FP/GPs reported quality of care increase. The impact on productivity is also positive, although less pronounced (45% report an increase, while 27% report no change and 18% indicate a decrease). Both quality and productivity increases are more prominent among physicians who had more experience using the technology. Younger FP/GPs, those remunerated by capitation and those rostering their patients were more likely to report a positive effect of adopting electronic records. Adopting electronic medical records yields positive impact on the ability of family physicians and general practitioners to provide patient care. As Canadian FP/GPs keep moving towards full digitization, those who have made the switch earlier will be able to sooner take full advantage of the new technology's capacities.

Co-Author(s): **Bilal Kobeissi**, College of Family Physicians of Canada

Models of Care

Osgoode (3rd Floor)

Modèles de soins

Osgoode (3^e étage)

C4.1 Facilitators and Barriers to Provincial Model of Care Development and Implementation

Presented by **AILEEN DAVIS**, Senior Scientist, Toronto Western Research Institute, UHN

Innovative arthritis models of care (MOC) are required due to high disease prevalence and variable access to arthritis health care resources. This study sought to identify facilitators and barriers to provincial MOC development and implementation in British Columbia (BC), Alberta (AB) and Ontario (ON), Canada. We conducted semi-structured, one-on-one interviews in two phases with health planners/decision-makers, program managers, and care providers to understand the process of and facilitators and barriers to providing care for people with arthritis. Phase 1 was a broad sampling of models while phase 2 included MOC, one rural and one urban in each province, for in-depth follow-up. Interviews were transcribed verbatim. We conducted thematic analysis of the content using a constant comparative approach to identify facilitators and barriers to developing and implementing provincial models of providing care. 79 interviews (BC=24, AB=22, ON=33) were conducted between 07/2010 and 01/2013 (28 (BC=9, AB=10, ON=9) were in-depth). Facilitators included: a broker providing leadership to health planners and program managers; broad buy-in, understanding and commitment from all stakeholders; flexibility to adapt to changing circumstances and to form new partnerships; management and infrastructure with a on the continuum of care and resources for maximizing health professional roles, integrating MOC based on local context, building capacity, knowledge dissemination, and evaluation. Provincial health policy and funding mechanisms were perceived as a barrier, particularly when funding models impeded health professionals working to full scope of practice, model sustainability or patient accessibility due to cost. Locally, lack of integration and patient awareness and acceptability were barriers. In contrast to literature that tends to focus on local MOC facilitators and barriers, this study identified facilitators from a macro to micro level. Provincial policies that facilitate arthritis management as a priority at regional and local levels are required to address current barriers to care for people with arthritis.

Co-Author(s): **Cheryl Cott**, Division of Health Care & Outcomes Research, Toronto Western Research Institute; **Linda Li**, Department of Physical Therapy, University of British Columbia; **Elizabeth Badley**, Division of Health Care & Outcomes Research, Toronto Western Research Institute; On behalf of the Models of Care in Arthritis Research Team

C4.2 Saving Fee For Service : The feasibility of a proposed physician group remuneration model

Presented by **NATALIE CLAVEL**, Anesthesiologist, Toronto Western Hospital

The purpose of this feasibility study was to evaluate a proposed physician-led, group remuneration model that leverages 10% of Fee For Service group billings, using a strategically designed performance scorecard, in order to demonstrate physician accountability to key stakeholders, ongoing commitment to ECFAA, and to generate a financial incentive with which to drive quality improvement among hospital-based physician groups. Baseline Departmental and individual physician performance were evaluated and adjusted for patient complexity, case mix, and learner presence. A performance scorecard was created to reflect the desired professional, clinical, educational, and academic aspects of individual physician practice. Using theoretical individual physician performance improvement scenarios (worst, average, best), and possible benchmarks (70th, 80th, 90th percentiles), the financial value of the 'At Risk' pool was modelled using computer simulation techniques. Patient complexity, case mix, and resident/medical student presence was shown to affect individual physician performance. Group performance as demonstrated using the performance scorecard, is dependent on the level at which benchmarks are set. The value of the 'At Risk' financial pool is sacrificed at the expense of improved group performance across measures. The resulting 'At Risk' financial pool can be used by the Department to either reward individual physician performance, or to fund Departmental activities that are deemed to be of value to the Department's strategic goals. This remuneration model is effective in creating a financial incentive for quality improvement within the existing Fee For Service system, without requiring any new money. The model allows for a redistribution of physician group FFS billings across individual physicians to reflect and incentivize contribution across clinical, educational, and academic domains.

C4.3 Patient Flow Initiatives: How We Get them Right - and Why We Get them Wrong

Presented by **SARA KREINDLER**, Researcher, Winnipeg Regional Health Authority / University of Manitoba

Like many healthcare systems, the Winnipeg Health Region (WHR) has long struggled to improve patient flow. Over the past decade, numerous initiatives at the regional, program, and hospital levels have striven to reduce Emergency wait times and inpatient length of stay. Why has the hoped-for improvement failed to materialize? This analysis, part of a broader study of WHR flow, considers improvement efforts at the initiative-by-initiative level. Review of over 700 documents (e.g., reports, presentations, meeting minutes, memos, quality plans) and interviews with 62 key informants furnished a comprehensive inventory of initiatives to improve adult patient flow into or out of Winnipeg hospitals. This included data on the nature, timing, and impacts of each initiative, as well as details on barriers and facilitators to implementation. As well, statistical process control was used to analyze region-wide and hospital-specific trends in flow. Findings were interpreted in the light of relevant literature. The literature reveals basic principles for the design and implementation of flow initiatives. Crucial design principles include a focus on the constraint (i.e., the greatest bottleneck or 'weakest link' in an entire process of care) and simplification of the process; key implementation factors include thorough planning and preparation, adequate training and support for practice change, staff engagement, and strong, in-group-based leadership. Certain local initiatives - such as one hospital's ED transformation and one program's process redesign to hasten discharge - have embodied these principles; many others, however, have not. Some initiatives have directed effort at non-constraint links whose optimization cannot improve the functioning of the whole chain; some have layered on new steps instead of simplifying processes; and some have lacked key requirements for successful implementation. Findings suggest that it would be more fruitful to focus implementation energies on the few initiatives with the greatest potential impact than to scatter resources among myriad less-effective ventures. Notwithstanding some promising local initiatives, the Region's decentralized approach has not facilitated a systematic process of identifying and addressing system-level constraints.

Health Quality & Safety

York (Lobby Level)

Qualité et sécurité des soins de santé

York (Réception de l'hôtel)

C5.1 Does improvement in emergency department length of stay lead to improvements in quality of care?

Presented by **MICHAEL SCHULL**, President and CEO, ICES

In 2009, Ontario launched a major policy initiative to reduce emergency department (ED) crowding, which included explicit targets for improvement in ED length of stay (LOS). We wondered whether improvement in ED crowding at the hospital level was associated with better timeliness and quality of emergency care. Retrospective, structured medical record review in 24 Ontario hospitals from April 2008 to March 2009 and April 2010 to March 2011 (before and after the introduction of the ED Process Improvement Program). Eleven hospitals were selected as 'improved' based on a $\geq 15\%$ relative and ≥ 0.5 hour absolute reduction in ED-LOS from 2008/09 and 2010/11 and compared with 13 'not improved' sites randomly selected among hospitals with increased or no change in ED-LOS. Quality indicators focused on acute myocardial infarction (AMI), asthma, and arm (children) or wrist (adult) fractures. Logistic regression models controlled for daily shift-level ED crowding. There were 2,656 AMI, 2,738 asthma, 2,030 adult fracture, and 1,427 pediatric fracture charts. Comparing change in performance over time at sites where ED-LOS improved with those where it did not, there were no differences in reperfusion (OR 0.58 [95% CI 0.27, 1.25]) or ASA (0.73 [0.51, 1.04]) for AMI; steroid within 60 minutes (OR 1.05 [0.67, 1.65]), no chest x-ray (OR 1.25 [0.87, 1.80]), corticosteroids at discharge (OR 0.81 [0.59, 1.11]), or documented discharge instructions (OR 0.87 [0.54, 1.40]) for asthma; or pain assessment (OR 0.96 [0.67, 1.36]; OR 1.15 [0.77, 1.73]), analgesic/splint (OR 0.76 [CI 0.37, 1.54]; OR 1.34 [0.58, 3.11]), or discharge instructions (OR 1.02 [0.64, 1.65]; OR 1.45 [0.54, 3.92]) for arm/wrist fracture among adults and children, respectively. Reductions in ED LOS were not associated with improved performance on several standard indicators of quality of care across a range of emergency conditions. Thus, while policies to improve ED-LOS are needed, they do not appear to improve the management of pain, asthma or AMI in the ED.

Co-Author(s): **Astrid Guttman**, Institute for Clinical Evaluative Sciences; **Therese Stukel**, Institute for Clinical Evaluative Sciences; **Marco Sivillotti**, Department of Emergency Medicine, School of Medicine, Queen's University; **Michael Schull**, Institute for Clinical Evaluative Sciences

C5.2 A Systematic Review of the Clinical- and Cost-effectiveness of Interventions for Frequent Users of the Emergency Department

Presented by **LESLEY SORIL**, MSc, University of Calgary

Emergency Departments (ED) are integral for treating acute and episodic medical needs, but costly settings for chronic, continuing care. Small subsets of patients, however, frequently rely on EDs for non-emergent care and chronic disease management. The objective here was to examine interventions to optimize care for frequent ED users. A systematic review of the literature from 1950-April 2013 was conducted. Studies were included if they: were designed as randomized controlled trials (RCT) or comparative cohort studies, were set in an emergency department or acute care facility, and examined the impact of an intervention to reduce frequent ED use. Studies reporting non-original data or focused on a specific patient population were excluded. Study design, patient population, intervention and outcomes (e.g. frequency of ED visits, in-patient admissions, days in hospital) were extracted and narratively synthesized. Costs related to implementation and per-patient hospitalization were summarized when available. Of 767 abstracts identified, 70 proceeded to full-text review. Fifteen articles (4 RCT and 11 comparative cohort studies) were included. Three intervention categories were identified: case management (n=10), individualized care plans (n=3), and information sharing (n=2). Eight of 10 studies examining case management reported moderate reductions in mean (-0.66 to -2.2) or median (-0.1 to -20) number of ED visits 12-months post-intervention. Of these, 4 studies reported reduced hospital costs (\$671 to \$7473/patient). One study on individualized care plans examined ED utilization and found no change in median ED visits. Evidence was mixed regarding information sharing: 1 study reported no change in mean ED visits, whereas the other reported a decrease in mean number of ED visits (-16.9) and cost savings of \$742/patient. The impact of all three frequent user interventions reported in the literature was modest. Case management had the most rigorous evidence base, yielded moderate cost savings, but with variable reductions in frequent ED use. Future studies evaluating non-traditional interventions, tailoring to frequent user subgroups or socio-cultural contexts, are warranted.

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C5.3 Weekend Admission and In-Hospital Mortality: Shall Patients Avoid Hospitals on Weekends?

Presented by **HANI ABUSHOMAR**, Senior Analyst, Canadian Institute for Health Information (CIHI)

Weekend admissions to acute care may jeopardize patient survival. We explored the effects of weekend and holiday admissions on in-hospital mortality in Canada and identified patient-level and system-level risk factors (e.g., disease severity and shortage of services) that were associated with variations of mortality between weekdays and weekends. The study included admissions to acute care facilities across Canada from CIHI's Discharge Abstract Database/Hospital Morbidity Database. The unit of analysis was each episode of care. We stratified episodes based on their urgency and the nature of procedures (surgical or medical). Logistic regression models were used to evaluate the association between weekend admissions and mortality adjusted for age, sex, comorbidities, and clinical and resource utilization characteristics. Heart attack and stroke patients were analyzed for the weekend effect. Various covariates (e.g. AMI type) were examined to identify the role of case mix difference in the observed associations. About 20% of episodes were admitted on weekends in Canadian hospitals. For medical and surgical patients admitted for urgent and scheduled reasons, as well as 27 out of 200 medical conditions we analyzed, weekend admissions were associated with increased mortality, even after adjustment for patient characteristics. Among patients with heart attack, weekend admission had a significant effect on mortality for NSTEMI patients, but not STEMI patients. NSTEMI patients admitted on weekends waited longer for acute care beds, were less likely to receive timely procedures and stayed in hospital longer. No weekend effect on mortality was found for stroke patients; however, weekend patients were less likely to receive timely services and more likely to be sent home independently. Weekend admissions may have significant and independent effects on in-hospital mortality for certain medical conditions. Patients admitted on weekends may be more severe than weekday patients. However, inadequate services may also cause higher mortality on the weekend. Further evidence is needed to investigate the causes of the weekend effect.

Co-Author(s): **Xi-Kuan Chen**, Canadian Institute for Health Information; **Ling Na**, Canadian Institute for Health Information; **Chelsea Taylor**, Canadian Institute for Health Information; **Katerina Gapanenko**, Canadian Institute for Health Information

C5.4 Using Geoinformatics to Evaluate Access to Emergency Stroke Care in Ontario

Presented by **LAUREN JEWETT**, Student, McMaster University

The emergency treatment of acute ischemic stroke in Ontario is provided through a network of stroke thrombolysis centres, some of which utilize telemedicine consultations (Telestroke) in varying capacities. Our objective was to evaluate the access that the public has to stroke thrombolysis, as well as the impact of Telestroke. Population data by Dissemination Area was used (Statistics Canada, 2011) to overlay polygons created by Service Area Analysis using ArcGIS 10.1 (ESRI, 2012). The service areas are based on the Ontario Roads Network (DMTI, 2012) and Ontario Cartographic Boundaries (Statistics Canada, 2012). Given the time-sensitive nature of stroke thrombolysis, the established geographic regions were divided into predefined driving times, towards stroke centres. Centres were categorized as being able to administer stroke thrombolysis independently (Regional and District centres), or utilizing the assistance of the Telestroke program. Catchment areas with and without the impact of the Telestroke program were compared. Of the 12 857 821 people living in Ontario in 2011, 99.83% have timely access to stroke thrombolysis, leaving 21 829 people, in Northern Ontario, without access. 71.86% of the population is within a 30 minute drive of a Regional or District centre, increasing to 91.28% when the Telestroke program is included, for an additional 2 501 121 people. 1.85% of the population have access only through the extended time window (between 3 to 4.5 hours), increasing to 3.86% with Telestroke, for an additional 258 618 people. The vast majority of people in Ontario have access to stroke thrombolysis. The Telestroke program improves timeliness of access for those in Southern Ontario, while providing otherwise nonexistent access to people living in rural and Northern communities. Considering geography is crucial when determining access to time-sensitive health care delivery.

Co-Author(s): **Demetrios Sahlas**, McMaster University

Cross-National Perspectives

Simcoe (Lobby Level)

Points de vue transnationaux

Simcoe (Réception de l'hôtel)

C6.1 A cross national examination of age at retirement and health

Presented by **MICHELLE SILVER**, Assistant Professor, University of Toronto

To examine the relationship between age at retirement and health status in the United States, Canada and Europe using three measures of health: self-rated health, chronic conditions, and physical mobility. This study analyzed data from nationally representative samples of adults 50 years old and over from the United States Health and Retirement Study (HRS), the Canadian Community Health Survey (CCHS), and the Survey of Health, Ageing and Retirement in Europe (SHARE). Odds ratios predicted the age of retirement for respondents in each region based on measures of health status and other demographic characteristics. Separate regression models focused on respondents who retired due to health limitations. Findings suggest that individuals retire later in the United States relative to the other regions despite having a higher average number of chronic health conditions. Poor self-rated health and limited physical mobility increased the odds of retiring earlier in European countries, while chronic health conditions significantly related to early retirement in Canada. There was some variation for respondents who retired due to health limitations. Poor health can lead to early retirement; this has implications for healthcare and pension systems worldwide. This study highlights differences in the relationship between health and retirement in the U.S., Canada, and Europe. Findings suggest that particularly in Canada chronic health conditions are significantly associated with early retirement.

C6.2 Bending the Cost Curve in the Country of the Red Queen

Presented by **KIMBERLYN MCGRAIL**, Associate Professor, CHSPR

Like every jurisdiction in the developed world, the government of British Columbia must wrestle with continuously escalating expenditures on health care. This paper assesses the likelihood that current efforts focusing on high expenditure patients will bend the cost curve. We analyze a unique data set constructed by the BC Ministry of Health inspired by the 'bridges to health' model from Lynn et al. The data first identifies groups individuals into 14 mutually exclusive and exhaustive population segments defined by similar needs for health care services; these range from non-users of services up through people in palliative care at the end of life. Costs of services for each population group are tallied by sex, age group and local health area for 50 different service lines. We focus in particular on older adults with complex chronic conditions. About 14% of the population are 'non-users' of health care services and another 36% are 'healthy', implying low expenditures. The latter group is declining in size over time. This half the population accounts for 4% of total expenditures. The 'frail in care' and 'high complex chronic condition' groups were together 5% of the population but accounted for 40% of total expenditures. There are large variations in spending in these high-expenditure groups. We find that reducing these variations would result in relatively large per capita savings (e.g. \$1,000 per capita) would result in only 1-1.5% reduction in overall spending. This is more than counter-balanced by increased spending observed over time on healthier groups - where spending is lower but population numbers are much higher. Bending the cost curve will require moderating underlying cost drivers that are themselves the consequence of many different policy decisions that pull expenditures in different directions. In short, uncoordinated policies arising from competing agendas and focus on specific population groups will likely only result in running to stand still - as in the country of the Red Queen.

C6.3 The Increasing Inefficiency of Private Health Insurance in Canada

Presented by **MICHAEL LAW**, Assistant Professor, UBC Centre for Health Services and Policy Research

Private health insurance plays a major supporting role in Canadian health care, accounting for 11.8% of 2012 health care spending. While the United States Affordable Care Act mandated that insurers pay out at least 80% of premiums as benefits, we have no information on the percentage paid out by Canadian insurers. We compiled the annual premiums collected and benefits paid for health care services by for-profit health insurers from 1991 through 2011 from Canadian Life and Health Insurance Association reports. This included premiums and benefits for prescription drugs, dental, disability, vision, and some other services. In 2011, private insurers collected premiums totaling \$16.8 billion, \$2.9 billion, and \$9.8 billion for group insured, individual, and uninsured health benefits plans, respectively. The percentage of these premiums paid out as benefits dropped substantially for both the group insured and individual plans between 1991 and 2011: from 92% to 74% for group insured and from 46% to 38% for individual plans. In contrast, the percentage for uninsured plans increased slightly from 94% to 95%. The percentage of premiums collected by for-profit insurers paid out as benefits has dropped significantly over the past 20 years. Unfortunately, the main shortcoming in any study of private insurance is the paucity of publicly available data regarding this sector. Governments across Canada should require greater transparency by private insurers, and consider regulating the percentage of premiums that must be spent on health care services.

Co-Author(s): **Jillian Kratzer**, UBC Centre for Health Services and Policy Research; **Irfan Dhalla**, St. Michael's Hospital

C6.4 Too Few, Too Weak: Conflict of Interest Policies at Canadian Medical Schools

Presented by **ADRIENNE SHNIER**, PhD Candidate, York University

The education of medical students should be based on the best clinical information available, rather than on commercial interests. The purpose of our study was to conduct the first-ever comprehensive evaluation of the conflict of interest (COI) policies at all 17 Canadian medical schools. We obtained both university-wide and medical school-specific COI policies, approved as of the end of September 2011, through web-searches and contacting the deans of each of the Canadian medical schools. These policies were evaluated based on 12 categories including gifts, consulting relationships, industry funded speaking relationships and speakers' bureaus, honoraria, ghostwriting, industry sales representatives, curriculum, and on-site education activities. We graded each category on a scale of 0 (permissive or non-existent policy) to 2 (stringent policy), in addition to enforcement measures which asked whether there (A) was a party responsible for COI policy oversight and (B) were sanctions for noncompliance. COI policies received summative scores that ranged from 0 to 19, where 0 was the lowest possible score and 24 was the maximum score. Twelve of the 17 schools scored less than 50% of the attainable maximum, and only one school scored higher than 75%. We found that COI policies at Canadian medical schools were most stringent in the areas of disclosure, ghostwriting, gifts, and scholarships. COI policies were weakest in the areas of samples, sales representatives, speaking engagements, and curriculum. This study provides the first comprehensive evaluation of Canada's 17 medical schools' COI policies. Our results suggest that the COI policy environment is generally permissive. We encourage Canadian medical schools to develop restrictive COI policies to ensure that medical students receive the best education, free of industry biases and COI.

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Equity and Inequities

Johnston (Convention Level)

Équité et facteurs d'inégalité

Johnston (Niveau « Convention »)

C7.1 Income-related inequalities for injury hospitalizations in Canada: trends and policy approaches

Presented by **ERIN PICHORA**, Program Lead, Canadian Institute for Health Information

The burden of the two leading causes of unintentional injuries - falls and motor vehicle accidents - disproportionately affects Canadians in lower socio-economic groups. This study examines trends in income-related inequalities for injury hospitalizations since 2001, and highlights interventions that may address these inequalities. As part of a larger project on health inequalities, pan-Canadian injury hospitalization indicators were calculated using hospital data. Age-standardized rates of unintentional falls and motor vehicle accident hospitalizations were computed by income quintile and sex at national and provincial levels for 2001/02 to 2012/13. For each year, we calculated rate ratios and rate differences (RD) comparing the highest and lowest income quintiles, as well as concentration index and the potential rate reduction, taking into account rate differences across the income distribution all five income quintiles. Policies and interventions to reduce inequalities in injuries were reviewed in academic and grey literature. In 2001/02, 411 per 100,000 Canadians living in low-income neighborhoods were hospitalized for falls compared to 314 per 100,000 from the most affluent neighborhoods (RD = 97 per 100,000). Although falls have declined somewhat over the past ten years across all income levels, the level of inequality, as measured by the RD, has remained the same at the national-level (97 per 100,000 in 2012/13). In contrast, inequality increased in British Columbia and declined in Atlantic Canada. Interventions to reduce inequalities in falls include subsidies in several jurisdictions for home repairs for seniors. During this same decade, motor vehicle injury hospitalizations also decreased across all income levels. However, results suggest that inequalities decreased, with RDs of 22 per 100,000 in 2001/02 and 15 per 100,000 in 2012/13. Overall, inequalities in hospitalizations for falls have persisted over time while inequalities in hospitalizations for motor vehicle accidents decreased slightly. By showcasing emerging or evaluated interventions, this work will help inform policy makers and system managers in their efforts to reduce inequalities in leading causes of illness such as injuries.

Co-Author(s): **Helen Wei**, Canadian Institute for Health Information; **Melina Marin-Leblanc**, Canadian Institute for Health Information; **Kelly Hogan**, Canadian Institute for Health Information

C7.2 An Organizational-level Intervention to Address Health Inequities in Primary Health Care Clinics

Presented by **ANNETTE BROWNE**, Professor, University of British Columbia

Our team is studying the effectiveness of a multi-component organizational-level intervention called 'EQUIP' to promote health equity at four clinics in BC and Ontario. We discuss (a) the 'EQUIP' intervention, and (b) approaches to studying its effectiveness drawing on baseline data from a cohort of 567 patients and 85 staff. We are testing the effectiveness of EQUIP using a mixed-methods, multiple-case study design. The four participating PHC clinics serve diverse patient populations including inner-city and rural residents, Indigenous peoples, and people experiencing trauma, violence and multiple disadvantages. EQUIP is novel in its focus on: (a) PHC organizations as complex adaptive systems, (b) enhancing organizational capacity to address the health consequences of discrimination and racism, and structural and interpersonal forms of violence, and (c) fostering shifts in organizational structures, practices and policies to address the health effects of social and structural inequities. Delivery of the components of EQUIP included facilitated staff education on equity-oriented care, trauma and violence informed care, and cultural safety. With the support of a practice consultant, the clinics are currently engaged in the 'Organizational Integration and Tailoring' phase of EQUIP, involving tailoring their clinic's practices, policies and structures to optimally meet the needs of their particular patient-populations. We discuss examples of the organizational changes that each clinic is making to enhance their capacity to provide equity-oriented services. We also highlight how we are measuring the impact of EQUIP on processes of care, short-term health outcomes, and organizational policies and practices. For example, measures such as the clinics' capacity to adopt a non-discriminatory posture, and tailor services to promote emotional safety are important gauges of effectiveness. Initial results indicate that EQUIP is showing promise as an intervention that can stimulate organizational shifts to enhance equity-oriented services in 'real world' clinical contexts. Ongoing longitudinal data collection to track the impact on patients will be described.

Co-Author(s): **Colleen Varcoe**, UBC; **Marilyn Ford-Gilboe**, Western University; **Nadine Wathen**, Western University; **Victoria Smye**, UBC

C7.3 Socio-economic status gradients among high-cost users in Ontario

Presented by **TIFFANY FITZPATRICK**, MPH, Public Health Ontario; **Laura Rosella**, PhD MHS, Public Health Ontario

The association of socio-economic status (SES) with health outcomes is well-known; however to date, research on high-cost users (HCU) has been limited by the use of few, and often ecological, measures of SES. In this current study, we examined multiple dimensions of SES and their distribution across HCU. We combined multiple cycles (2003, 2005 and 2007/8) of the Ontario sample of the Canadian Community Health Survey. SES measures included individual-level variables, such as household income, education, and home-ownership, and ecological measures derived from the Ontario Marginalization Index, such as dependency (e.g. proportion of working-age population not participating in the labor force, population aged 0-14 and 65+). We calculated gradients of spending (Top 1%, 2-5%, 6-50% and Bottom 50%) by linking respondents to health administrative data for the year following interview. Multinomial logistic regression was used to examine associations between SES measures and health service use categories. Among a population-based sample of 91,223 Ontarians aged 18+, HCU tended to have less than post-secondary education, lower household income, be non-homeowners and live in areas of high-dependency. Over one-third of HCU (Top 1%) were from low-income households and approximately 56% were below middle-income; merely 13% of the Bottom 50% were low-income. Similarly, significant and strong linear associations were noted for area-level dependency across gradients of utilization. These patterns were repeated, with weaker strengths of association, for other SES measures. Compared to the Bottom 50%, the odds of belonging to a low-income, compared to high-income, household were nearly 7 times greater for Top 1% HCU. Though remaining largely significant, these associations weakened after age-adjustment; with the exception of home-ownership, which was strengthened. We have shown that different measures of SES have varying magnitude and strengths of association with being a HCU. Additional work is required to further understand the temporal relationship between SES and HCU. These findings suggest addressing social determinants of health, such as income, may be an important component of interventions targeting HCU.

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C7.4 Lack of government-funded optometric services is associated with reduced utilization of eye care providers and increased utilization of family doctors

Presented by **YAPING JIN**, MD, PhD, University of Toronto

Canadian optometric eye care services are inconsistently funded by government. We investigated whether lack of government-insured optometric services is associated with unequal patient utilization of optometrists, ophthalmologists and family doctors. We compared the utilization of eye care providers (including optometrists and ophthalmologists) and family doctors among Caucasians residing in provinces with and without government-insured optometric services. Derived data was based on self-reports from the Canadian Community Health Survey 2005 (n= 132,221) collected by Statistics Canada. Optometrists (who provide primary eye care and require no referrals) and ophthalmologists (who provide specialist eye care and require a referral) were combined together because the survey question did not distinguish them. The exclusion of non-Caucasians was due to the need to make valid comparisons and small sample size for non-Caucasians. Among Caucasians without known eye disease, the utilization of eye care providers was lower in provinces with uninsured provincial optometric services (33.5%) versus provinces with government-insured optometric services (38.2%, p<0.05). Larger differences were found for people aged 12-17 (38.5% vs 47.7%, p<0.05) and 65+ (38.1% vs 51.5%, p<0.05). Among people aged 12+ who used an eye care provider in a 12-month period, 87.3% used a family doctor if they resided in provinces with uninsured optometric services, compared to 82.5% (p<0.05) in provinces with government-insured optometric services, suggesting more people visit a family doctor for eye care in uninsured provinces. About a 5% (p<0.05) increased utilization of family doctors was observed for provinces with non insured optometric services in both univariate and multivariate analyses. Lack of government-funded optometric services is associated with reduced utilization of eye care providers and increased utilization of family doctors. This is likely due to financial barriers inhibiting access to optometrists in provinces without insured optometric services.

Co-Author(s): **Richard Wedge**, Health PEI; **Sherif El-Defrawy**, University of Toronto; **John Flanagan**, University of Waterloo; **Graham Trope**, University of Toronto

Concurrent Sessions D

Wednesday, May 14, 2014 | 2:30pm – 3:45pm

Séances simultanées D

Le mercredi 14 mai 2014 | 14 h 30 – 15 h 45

Panel Presentation

Toronto Ballroom III (Convention Level)

Présentation en Panel

Toronto Ballroom III (Niveau « Convention »)

D1.1 Integrating sex and gender in health services and policy research: Have you considered the possibilities?

Moderated by **ROBYN TAMBLYN**, Scientific Director, CIHR Institute of Health Services and Policy Research

Presented by **IVY BOURGEOULT**, Professor, University of Ottawa, CIHR Chair in Gender, Work and Health; **STEVE MORGAN**, Professor, University of British Columbia, Director, Centre for Health Services and Policy Research; **ARLENE S. BIERMAN**, Professor, University of Toronto, Women's Health Research Chair, University of Toronto and St. Michael's Hospital

While men and women are similar in many ways, a growing body of evidence demonstrates that when it comes to our health and wellbeing, our differences matter. Every cell is sexed and every person is gendered. Sex and gender influence our risk of developing certain diseases, how well we respond to medical treatments, and how often we seek health care. We can no longer assume that drugs, devices, interventions and policies are equally appropriate for women and men. Yet, critical knowledge gaps still remain related to the influence of sex and gender in many key areas of health services and policy. How does gender influence the sustainability of our health work force? Is primary health care in Canada meeting the needs of women and men? How can we explain the alarming gender gap in prescription drug use? These are complicated questions. The more we understand how sex and gender affect health, the more we can improve health and wellbeing for everyone. It starts with better science. Hosted by the CIHR Institute of Gender and Health, this dynamic panel of thought leaders will stimulate dialogue and new thinking in the under-discussed area of sex and gender in health services and policy research. Drawing on evidence from their individual programs of research, panelists will collectively explore sex and gender considerations in three high priority topics of interest to the diverse CAHSR community: health human resources, primary health care and prescription drugs. During this session, delegates will learn: To recognize how sex and gender considerations are being integrated into health services and policy research and why this is important; To understand how sex and gender-based analysis can be used to explore differences in the health behaviours, needs and outcomes of women and men; To consider the possibilities of integrating sex and gender in their own work to spark discovery, innovation and health impact.

Panel Presentation

Tom Thompson (Convention Level)

Présentation en Panel

Tom Thompson (Niveau « Convention »)

D2.1 Indigenous values and health systems stewardship, an approach for health systems performance in circumpolar regions

Presented by **SUSAN CHATWOOD**, BScN, MSc, Institute for Circumpolar Health Research; **VANESSA HIRATSUKA**, PhD, MPH, Senior Researcher, Southcentral Foundation, Research Development; **HEATTA GUNN KRISTIN**, Director, Sami National Competence Centre for Mental Health Services (SANKS); **SIV KVERNMO**, MD, PhD, Professor, Department of Clinical Medicine, Faculty of Health Sciences, University of Tromsø; **FRANCOIS PAULETTE**, Chair, Stanton Territorial Elders Council; **HEIDI ERIKSEN**, MD, PhD, GP, Municipality of Utsjoki, Health Care Centre

In the current climate of healing and repatriation, an organized and respectful health systems response is required for Indigenous populations. Such a systems response needs to be based on values, ethics, and trust and be strategically aligned to inform good governance and policy. The concept of health systems stewardship provides a holistic framework that is well suited to nations addressing this task. This session will highlight Indigenous values that underlie and direct effective stewardship of health systems in circumpolar countries including the United States, Canada, Finland, and Norway. Panelists will highlight experiences that were captured through a workshop that utilized a collaborative consensus-based approach with subject-area experts and embedded participatory elements. Nine health-systems values were identified and described: humanity, cultural responsiveness, teaching, nourishment, community voice, kinship, respect, holism, and empowerment. Panelists will highlight health systems examples that uphold Indigenous values that were identified. Panel discussions will explore how good stewardship can be responsive to promote values-based care and highly performing health systems in circumpolar regions.

Health Policy & Politics

Jackson (Convention Level)

Les politiques et la politique de la santé

Jackson (Niveau « Convention »)

D3.1 How does the public want to be involved in health care and health research policy?

Presented by **CAROLYN BARG**, Research Officer, Institute of Health Policy, Management and Evaluation, University of Toronto

There has been growing attention to engaging the public in health policy, in contexts of health care programs and health research. We explored public preferences for involvement in health policy decisions, comparing expectations across health research and health care contexts, and the nature of engagement: providing input versus having control. In January 2013, a bilingual (French, English) Internet survey was administered to a representative sample of Canadians to explore preferences regarding the public's roles in health care and research. Covariates included attitudes toward: trust in research and health care; importance of access to health care; beliefs about the role of evidence and ethics in policy; and demographics. We used descriptive statistics to categorize respondents by preferred roles in health care and research: (i) input plus control, (ii) input without control, (iii) limited input without control, and ran two polytomous logistic regressions to assess attitudinal and demographic influences on role preferences. The survey participation rate was 94%; 1213 completed responses met quality criteria (52% completion rate). The dominant preference for the public's role was for input without control, though the preference for this role was higher in health care (57.1%) than research (46.8%). Preference for both input and control (22.9%) was the next favoured role in health care, while limited input without control (33.2%) was next favoured for research. In general, preference for a greater public role was associated with belief that access to medicines was important; greatest interest in control was associated with preference for use of moral and ethical knowledge over scientific evidence in decision-making in both contexts, and with reduced trust in the government's stewardship in the context of health care. There is considerable public enthusiasm for policy making that takes account of the public's views, but less enthusiasm for public control of policy decisions. Reduced trust increases the desire for control. These findings are relevant to how we design and implement public engagement initiatives.

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D3.2 What supports do health system organizations have in place to facilitate evidence-informed decision-making? A qualitative study

Presented by **MORIAH ELLEN**, Investigator, McMaster University

The purpose of this study was to profile the supports and instruments (i.e., programs, interventions, instruments or tools) that healthcare organizations currently have in place and which ones were perceived to facilitate evidence-informed decision-making. In-depth semi-structured telephone interviews were conducted with individuals in three different types of positions (i.e., a senior management team member, a library manager, and a 'knowledge broker') in three types of healthcare organizations (i.e., regional health authorities, hospitals and primary care practices) in two Canadian provinces (i.e., Ontario and Quebec). The interviews were taped, transcribed, and then analyzed thematically using NVivo 9 qualitative data analysis software. A total of 57 interviews were conducted in 25 organizations in Ontario and Quebec. The main findings suggest that, for the healthcare organizations that participated in this study, the following supports facilitate evidence-informed decision-making: facilitating roles that actively promote research use within the organization; establishing ties to researchers and opinion leaders outside the organization; a technical infrastructure that provides access to research evidence, such as databases; and provision and participation in training programs to enhance staff's capacity building. This study identified the need for having a receptive climate, which laid the foundation for the implementation of other tangible initiatives and supported the use of research in decision-making. This study adds to the literature on organizational efforts that can increase the use of research evidence in decision-making. Some of the identified supports may increase the use of research evidence by decision-makers, which may then lead to more informed decisions, and hopefully to a strengthened health system and improved health.

Co-Author(s): **Gregory Leon**, Laval University; **Gisele Bouchard**; **John Lavis**, McMaster University; **Mathieu Ouimet**, Laval University

D3.3 Reconciling the twin goals of health and wealth? A role for health services and policy research in Canadian science and technology policy

Presented by **PASCALE LEHOUX**, Full Professor, University of Montreal

Science and technology (S&T) policies encourage the creation of health technology spin-offs, seen as engines for economic growth. Yet, there is a significant dissonance between emerging technologies and the needs of health systems for affordable, relevant and sustainable innovations. We examined the influence of capital investment, regulation and S&T policy over technology development processes. Drawing on institutional theory, our five-year fieldwork involved a phased approach wherein the rationales and practices of technology developers and external institutional actors were documented. We conducted interviews (n=11) with technology transfer and regulatory experts and with five Montreal-based academic spin-offs. We analysed their annual reports (n), press releases (n=653) and media coverage (n=793). Additional interviews (n=23) were conducted with academic technology developers, capital investors, regulators and policymakers, as well as three focus groups with clinicians, technology developers and patient associations (n=19). By relying on criteria and rules that are geared at the fulfillment of their own institutional goals, capital investment, regulation and S&T policies largely structure the way technology developers set their priorities and reach their most important milestones. Along the lifecycle of academic spin-offs, these institutions condition what the opportunities for 'success' are. The institutional rules at play are generally unresponsive to whether and how the emerging technology will affect health systems. Overall, institutionalized patterns of interactions tend to replicate wealth creation dynamics that reinforce the value logics of the technology industry big players. The way established institutional actors structure how the twin policy goals of health and wealth are reconciled in practice thus requires careful consideration. If the goal is to increase the relevance of innovations from a health policy standpoint, greater attention to the rules that govern how decisions are made along academic spin-offs' lifecycle is required. Health services and policy researchers could not only bring a valuable expertise to judgements of technological potential, but they may even have a duty to do so.

Co-Author(s): **Fiona A. Miller**, Institute of Health Policy, Management and Evaluation; **Genevieve Daudelin**, IRSPUM, University of Montreal

D3.4 Canada's First Pan-Canadian Hospital Experience Survey: A Review of Pilot Results

Presented by **JEANIE LACROIX**, Manager, Performance Improvement & Capacity Building, Canadian Institute for Health Information

A Canadian organization, in consultation with a national expert committee, developed an acute care patient experiences questionnaire for pan-Canadian comparisons using the Hospital Consumer Assessment of Healthcare Providers and Systems as a base with additional items developed for Canadian context. Following cognitive testing a pilot was conducted to ensure the questions performed well within real settings. The pilot test was conducted in three provinces across Canada within general acute care settings including medical, surgical and maternity services, using both mail and telephone from July to September 2013. The French survey was tested through the mail mode only. Alberta conducted the testing using telephone, Ontario used both telephone and mail, and British Columbia used mail only surveys. In order to achieve a diverse sample within provinces, facilities were selected based on facility characteristics such as rural or urban location, facility type: community or teaching, facility size, and whether they served English as a second language populations. Overall there were 1,130 surveys completed and returned. For the mail mode of administration, the response rate was 25.3% (825/3262), which was slightly higher than expected. For the English portion of the survey in Ontario the response rate was 27.2% (353/1300) and for the French portion it was 21.1% (203/962). Analysis highlighted some issues related to both the flow of questions and the instructions for completing the survey that were not evident in the cognitive test phase. These findings were used to modify the final version of the survey based on expert consultations. Pilot test results reinforced the quality of the survey tool. The benefits of having a pan-Canadian survey include having comparative data to assess health care services, informing quality and efficiency improvements and identifying key measures to improve and monitor patient-centred care. Next steps include survey administration documentation and implementation.

Co-Author(s): **Salima Hadibhai**, Canadian Institute for Health Information; **Michael Murray**, Knowledge for Improvement Consulting; **Kristen Hart**, Canadian Institute for Health Information

Mental Health

York (Lobby Level)

Santé mentale

York (Réception de l'hôtel)

D4.1 Fertility rate trends among adolescent girls with major mental illness: a population-based study

Presented by **SIMONE VIGOD**, Psychiatrist and Scientist, Women's College Hospital

Fertility rates among adolescents have decreased substantially in recent years, yet fertility rates among adolescent girls with mental illness have not been studied. We examined temporal trends in fertility rates among adolescent girls with major mental illness. We conducted a repeated annual cross-sectional study of fertility rates among girls aged 15-19 in Ontario, Canada (1999 to 2009). Girls with major mental illness were identified through administrative health data indicating the presence of a psychotic, bipolar or major depressive disorder within 5 years preceding pregnancy (60 228 person-years). Remaining girls were classified into the comparison group (4 496 317 person-years). The age-specific fertility rate (number of live births per 1000 girls) was calculated annually and using 3-year moving averages for both groups. The incidence of births to girls with major mental illness was 1 in 25. The age-specific fertility rate for girls with major mental illness was 44.9 per 1000 (95% CI 43.3-46.7) compared to 15.2 per 1000 (95% CI 15.1-15.3) in unaffected girls (Rate Ratio 2.95, 95% CI 2.84-3.07). Over time, girls with major mental illness had a smaller reduction in fertility rate (Relative Rate = 0.86, 95% CI 0.78-0.96) than unaffected girls (Relative Rate = 0.78, 95% CI 0.76-0.79). These results have key clinical and public policy implications. Our findings highlight the importance of considering major mental illness in the design and implementation of pregnancy prevention programs as well as in targeted antenatal and postnatal programs to ensure maternal and child well-being.

Co-Author(s): **Cindy Lee Dennis**, Women's College Research Institute and University of Toronto; **Paul Kurdyak**, Centre for Addiction and Mental Health, University of Toronto, Institute for Clinical Evaluative Sciences; **John Cairney**, McMaster University, Institute for Clinical Evaluative Sciences; **Astrid Guttmann**, Hospital for Sick Children, University of Toronto, Institute for Clinical Evaluative Sciences; **Valerie Taylor**, Women's College Hospital and Research Institute, University of Toronto

D4.2 Utilization of health and mental health services in the year prior to suicide among Aboriginal people in Labrador

Presented by **NATHANIEL POLLOCK**, PhD Candidate, Labrador Institute, Division of Community Health and Humanities, Faculty of Medicine, Memorial University

The goal of this project was to generate evidence for a regional suicide prevention strategy. We partnered with Aboriginal groups and the health authority in Labrador to examine 89 suicide deaths. The objective was to identify patterns of health service utilization in the year prior to suicide death. This study used a case-control design to examine the demographics, clinical characteristics, and health service utilization patterns among individuals that died by suicide. We reviewed the health, mental health, and medical examiner records of all individuals that died by suicide from 2002 to 2012 and compared them to a control group. In this preliminary analysis of the deaths, we used descriptive statistics to identify potential trends in demographics and service utilization. The initial analyses revealed that individuals that died by suicide were primarily male (85.4%), less than 30 years old (68.5%), Aboriginal, and from northern Labrador (75.3%). The results also revealed that prior suicide-related behaviour and alcohol or substance abuse was common, although mental disorders were diagnosed in relatively few individuals. Approximately half of the individuals that died by suicide had contact with the health or mental health system in the year prior to their death, although only a few of these contacts were with a counsellor or psychiatrist. These results appear to depict a common profile for individuals that die by suicide in Labrador. Many individuals did not have contact with the health system before their death, and fewer had psychiatric diagnoses. This underscores the need for improved health system interventions and a population-level approach to suicide prevention.

Co-Author(s): **Jane Rennison**, Labrador-Grenfell Regional Health Authority; **Alison Morris**, Labrador-Grenfell Regional Health Authority; **Michael Jong**, Labrador-Grenfell Regional Health Authority; **Shree Mulay**, Division of Community Health and Humanities, Faculty of Medicine, Memorial University

D4.3 Similarities and Differences in Philosophies of Care between Child and Adult Mental Health Services: A Systematic Review

Presented by **TRAM NGUYEN**, MSc, PhD Candidate, CIHR Doctoral Fellow, School of Rehabilitation Science & CanChild Center for Childhood Disability Research, McMaster University; **GILLIAN MULVALE**, Assistant Professor, Health Policy and Management, McMaster University; **ASHLEIGH MIATELLO**, PhD Student, Health Policy, McMaster University

Vulnerable youth frequently 'fall through the cracks' during the transition from child/adolescent (CAMHS) to adult mental health services (AMHS). The objective was to systematically review the peer-review literature to understand similarities and differences in philosophies of care between CAMHS and AMHS for youth with mental health disorders. Peer-reviewed literature was searched using terms related to 'child' or 'adolescent', 'mental health' and 'transition' and 'philosophies of care' using CINAHL, EMBASE, HealthSTAR, MEDLINE, PsycINFO, Proquest, and Web of Science databases and reference tracking. Articles were selected for inclusion based on title/abstract review, full article review and quality assessment. Member checking among the research team and a common data extraction tool promoted consistency in abstract screening and data extraction. Feedback on initial results was gathered from the project Steering Committee comprised of experts in mental health delivery, research, policy-making and youth mental health service users and family members in Ontario. Results of the search identified 1538 articles of which 209 met the inclusion criteria following abstract review. Full text review resulted in the inclusion of 17 articles in the final review. Three categories of differences in philosophies of care between CAMHS and AMHS were identified: differences in approach; differences in range of problems addressed; and differences in extent of parental involvement. CAMHS were characterized as being more supportive and family-centred, placing greater consideration on developmental stages, including a broader range of mental health issues and as having more parental involvement. AMHS were characterized as being more individualistic, more focused on conditions that met strict DSM diagnostic criteria and more focused on individual responsibility in attending appointments and involvement in care. Differences in philosophies of care between CAMHS and AMHS were widely referred to as presenting challenges for adolescents and family members with few suggestions for improvement. Further research is required and will be pursued through upcoming key informant interviews and focus groups with youth, families, providers and policy-makers in Ontario.

Co-Author(s): **Tram Nguyen**, McMaster University; **Ashleigh Miatello**, McMaster University

Health Human Resources

Simcoe (Lobby Level)

Ressources humaines en santé

Simcoe (Réception de l'hôtel)

D5.1 Could primary care NPs turn out to be a disruptive innovation?

Presented by **DAMIEN CONTANDRIOPOULOS**, Professor, Université de Montréal

Despite significant investments and a growing commitment to developing stronger primary care delivery structures, the primary care capabilities of Canada's healthcare system lag behind those of other rich countries. This presentation will discuss the causes of this phenomenon and the potential contribution of NPs to disrupt the status quo. This presentation rests on two sources of data. The first is a research project co-funded by CIHR and Quebec's Health Ministry on the implementation of primary care NPs in Quebec. Data from this project comprise the results of a large-scale review of the scientific literature on primary care NPs as well as of six case studies of primary care teams incorporating an NP. The second source is the preliminary results from a CIHR-funded research project on Quebec healthcare system stakeholders' views of the challenges faced by the current system and their preferences regarding reform pathways. There is robust evidence that improved primary care capacities are needed to control healthcare expenditures while improving access and adapting to mounting demographic pressures. However, our data show that deeply embedded structural features of the way primary care is conceived and produced impede the system's capacity to implement new models with desirable features such as teamwork, redefined professional boundaries, alternative funding and accountability mechanisms, etc. At the same time, those desirable features are the necessary conditions for successful introduction of NPs into primary care teams. This presentation will use the concept of 'disruptive innovation' to analyze, from a macro-systemic perspective, the potential of NPs' inclusion in teams to re-shape the primary care delivery landscape. In conclusion, data on stakeholders' positions and political power will be used to assess the challenges and opportunities of introducing primary care NPs into teams as a means of disrupting the status quo to improve primary care accessibility and quality in Canada.

Co-Author(s): **Astrid Brousselle**, Université de Sherbrooke; **Mylaine Breton**, Université de Sherbrooke; **Marie-Dominique Beaulieu**, Université de Montréal; **Jeannie Haggerty**, Université McGill

D5.2 Nurse Practitioner Productivity and National Comparison of Nurse Practitioner Salaries in Primary Health Care

Presented by **RUTH MARTIN-MISENER**, Dalhousie University

Primary healthcare nurse practitioner (PHCNP) productivity is determined by metrics like the number of rostered patients and wait times. These metrics do not capture factors affecting PHCNP productivity. Our study aims to summarize evidence regarding community-based PHCNP productivity, and compare pay scales to identify if differences exist across Canada. We undertook a scoping review of the published and grey literature for the period of January 2000 to February 2013 to identify French or English language papers that address PHCNP productivity and pay scales. We searched bibliographic electronic databases and Canadian and international professional and governmental websites, and corresponded with experts in the field. Papers were excluded if they addressed other nursing roles. Two researchers reviewed title and abstracts, and data extraction. Data were extracted using a structured form. Content analysis and descriptive statistics were used. The presentation will outline factors influencing PHCNP productivity and compare pay scales across Canada. We identified 97 peer-reviewed articles and grey literature documents. Most of the papers were published in Canada and the United States after 2010. Unpublished reports were the most common type of paper that described productivity or pay scales. Typical appointment times varied from 15 to 60 minutes according to the reason of the health visit and patient characteristics. The average number of patients seen per day by PHCNPs was 9 to 15. Current methods to estimate productivity and panel size use large databases, provider work hours and the average number of patient visits. Patient, provider and system factors influence the determination of panel size. Pay scales varied greatly across and within jurisdictions, if PHCNP positions were unionized and the type of primary care practice. The measurement of productivity and the determination of panel size are complex. Current metrics may not capture PHCNP-relevant activities. Outcomes research is absent in the determination of panel size. There are few systems in place to track and measure PHCNP activities. Salary differences can lead to workplace shortages.

Co-Author(s): **Kelley Kilpatrick**, Université de Montréal; **Denise Bryant-Lukosius**, McMaster University; **Ruta Valaitis**, McMaster University; **Nancy Carter**, McMaster University

D5.3 The impact of an economic downturn on employment of nurses: Does policy play a role?

Presented by **MARY CREA-ARSENIO**, Research Coordinator, Nursing Health Services Research Unit, McMaster University

The objective of this study was to evaluate the effectiveness of a government employment policy in mitigating the impact of an economic downturn on full-time employment of new graduate nurses in Ontario. The Nursing Graduate Guarantee (NGG) was designed to increase full-time employment of newly graduated Registered Nurses (RNs) and Registered Practical Nurses (RPNs) in Ontario. Introduced in 2007, the NGG was active during 2008-2009 financial crisis. A longitudinal employment database developed from yearly evaluations was used in this study. Comparative analysis of full-time employment rates for NGG new graduate nurse participants and non-participants was used to determine the association between NGG participation and employment outcomes from 2008 to 2012. Results were assessed against overall employment trends of new nurses in Ontario during the same period. From 2008 to 2012, the trend in full-time employment of new graduate nurses was similar to that of other young workers in Ontario. As with other young workers new graduate nurse full-time employment rates decreased following the 2008-2009 financial crisis. The impact of the economic downturn on full-time employment of NGG participants was less severe than for non-participants (a 13% decrease in full time for NGG participants compared to a 27% decrease for non-participants). In addition, NGG RNs and RPNs were more likely to be employed in full-time positions within the first year of their careers compared to non-NGG RNs and RPNs in nearly all years examined. The difference between NGG participants and non-participants was more pronounced for RPNs than for RNs. Government employment initiatives such as the NGG can mitigate negative employment trends of health professionals in worsening economic conditions. It is important to evaluate the impact of government policies on employment over time and examine the relationship to changes in the economy.

Co-Author(s): **Andrea Baumann**, Nursing Health Services Research Unit, McMaster University; **Mabel Hunsberger**, Nursing Health Services Research Unit, McMaster University; **Paul Rizk**, Nursing Health Services Research Unit, McMaster University

D5.4 Best Elder Care and Acutely Admitted Older Adults: Mapping the Geriatric Educational Needs of Practicing Nurses in Ontario

Presented by **MARY FOX**, Associate Professor, York University

The objectives of this study are to explore the perspectives of staff nurses on their knowledge needs to provide best care to acutely ill or injured older people, and develop strategies to increase nurses' knowledge. Thirteen focus group sessions were held with a purposeful criterion-based sample of 57 acute care hospital staff nurses [33 Registered Nurses (RNs) and 24 Registered Practical Nurses (RPNs)] obtained from the Ontario College of Nurses Registry. A semi-structured interview guide was used to explore nurses' perspectives on the knowledge needs of staff nurses to provide best care to acutely ill or injured older people, and strategies to increase nurses' knowledge. The transcripts were analyzed using thematic analysis techniques. Participants identified two interrelated knowledge needs: knowledge of caring for older patients as whole people, and knowledge of how to assess, prevent and manage geriatric syndromes (e.g. delirium, pressure ulcers, falls, and urinary incontinence) commonly associated with poor outcomes. Participants indicated that the most effective and efficient ways to acquire this knowledge is through hybrid modes of learning that combine succinct workshops conducted during work time, online learning from home, and experiential education rooted in clinical practice at the point-of-care (e.g. opportunities to work on units recognized as providing exemplary care to older people, working through case studies, and receiving/providing mentorship). Participants identified the educators best positioned to mentor nurses in learning this knowledge as advanced practice nurses (e.g. Geriatric Emergency Management nurses and wound care nurses) with geriatric knowledge and whose role includes time dedicated to both patient and family care and mentorship to staff nurses. Ongoing education focused on the assessment and management of geriatric syndromes associated with functional decline and using hybrid modes of delivery are recommended to facilitate nurses' ability to provide function focused care.

Co-Author(s): **Jeffrey Butler**, York University; **Malini Persaud**, York University; **Deborah Tregunno**, Queens University; **David Ryan**, Regional Geriatric Program of Toronto

Healthcare Leadership and Management

Osgoode (3rd Floor)

Leadership et gestion des soins de santé

Osgoode (3^e étage)

D6.1 Managing the Social Environment: What Matters to First Line Managers

Presented by **EMILY PECK**, Research Assistant, The Centre for Organizational Research and Development

The research question was whether first line managers' (FLM) assessment of their own transformational leadership behavior was related to different aspects of their workplace experience that was their assessments of their supervisors' transformational leadership behavior. We also considered factors associated with staff members' assessment of FLMs' transformational leadership. A survey of Canadian health care providers included responses from 1857 staff members and 142 FLMs. The survey included assessments of the transformational leadership of participants' immediate supervisor as well as measures of burnout, areas of worklife, attachment styles, and workplace civility/incivility. FLMs also assessed their own transformational leadership. The survey was part of a three year project to assess the impact of a peer mentoring resource for first line managers. The project emphasized the challenges inherent in managing the social environment of hospital workgroups. Multiple regression analyses found the following: (1) The assessments from both staff members and FLMs of supervisors' transformational leadership were negatively associated with the raters' level of cynicism. (2) For staff members, an avoidant approach to relationships was also negatively associated with leadership ratings. In addition, perceptions of fairness were positively associated with ratings of their FLMs' leadership. (3) For FLMs, the level of civility within their workgroups was positively associated with their assessments of their supervisors' leadership. (4) In contrast, FLMs' assessment of their own transformational leadership was associated with their sense of efficacy. Further, positive leadership ratings were associated with close alignment of personal and organizational values and low levels of anxiety in social relationships. The analysis indicated assessments of supervisors' leadership is negatively associated with raters' feelings of distress. In contrast, FLMs' assessment of their own leadership is tied to their sense of efficacy and core values. For both, the workplace social environment matter. Implications for healthcare leadership development are discussed.

Co-Author(s): **Michael Leiter**, Acadia University; **Arla Day**, Saint Mary's University; **Heather Laschinger**, University of Western Ontario; **Mary Ellen Gurnham**, Capital District Health Authority

D6.2 Control, appropriateness and performance: A qualitative study of Ontario health system leaders' views on the promises of accountability

Presented by **JESSICA BYTAUTAS**, Graduate Student, University of Toronto

Accountability is a key dimension of contemporary health system governance, yet how it works remains little understood. Cancer Care Ontario (CCO), the provincial cancer agency, operates under a model of accountable governance that has been hailed as exemplary. In this context, we explored cancer system leaders' views on accountability. Qualitative, semi-structured interviews were conducted with 19 participants from the Ontario Ministry of Health and Long-Term Care (n=5), CCO's executive team and board of directors (n=7) and administrative and clinical advisory councils (n=4), and the Cancer Quality Council of Ontario (CQCO) (n=3). Dubnick's 'Promises of Accountability' framework, which posits six goals of accountability that arise at the intersection of time (inputs, processes, or outcomes) and value (instrumental vs. intrinsic), guides this work. Interview data were analyzed using a qualitative descriptive approach. At the input stage, cancer-specific regulations were somewhat weak, but agency-wide directives were a necessary if not burdensome force. Finances functioned at a contractual level, but were also leveraged to incentivize participation from clinicians and regional cancer programs. Processes were encoded into agency-wide and CCO-internal directives around appropriate behaviour, and in clinical guidelines and standards developed. Processes operated indirectly, as well, through fostering trust-based partnerships and clinician engagement, which were seen to add legitimacy and credibility. At the outcome stage, information was critical to CCO's performance management process. In addition to ensuring targets agreed upon at the input stage were met, public reporting of performance data was seen to create a sense of transparency and appeal to collective and individual desire to improve. We present a modified 'Promises of Accountability' framework that emphasizes the goals of control, appropriate behaviour, and performance. This research helps fill a gap in the literature and may help facilitate efforts on the part of health system leaders and decision-makers across sectors to promote successful and sustained accountability.

Co-Author(s): **Mark Dobrow**, University of Toronto; **Terrence Sullivan**, University of Toronto; **Adalsteinn Brown**, University of Toronto

D6.3 Analyse de l'apprentissage du rôle de directeur général et de son entrée en fonction au sein d'une organisation de santé québécoise

Presented by **SOPHIE VALLIÈRES**, M.Sc. Administration des services de santé, Université de Montréal

Le but général de cette étude consiste à documenter le portrait d'un leader à titre de Directeur Général et la gestion de son entrée en fonction au sein d'une organisation de santé québécoise. Plus spécifiquement, cette étude vise à comprendre les facteurs et le processus individuel qui mènent une personne à devenir DG et le processus d'intégration d'un nouveau Directeur Général dans une organisation de santé québécoise. De plus, un troisième objectif consiste à proposer un modèle intégrateur s'inspirant de celui proposé par Denis J.-L. et coll. (2000) et de produire une analyse réflexive rigoureuse basée sur le modèle intégrateur proposé. Au cours d'une période de 15 mois, la collecte de données, basée sur des entrevues et l'analyse de documents, nous a permis de parfaire la compréhension des facteurs et le processus individuel qui mènent une personne à devenir DG et son processus d'intégration dans une organisation de santé québécoise. Considérant que le modèle de Denis J.-L. et coll. (2000) a émergé suite à l'étude d'un cas unique, la présente étude se veut une façon de répliquer une procédure similaire, soit l'étude d'un cas individuel, de type portrait d'un leader. Ce cas illustrera l'entrée en fonction de Lynne McVey, nouvellement promue à titre de Directrice Générale de l'Institut universitaire en santé mentale Douglas, depuis janvier 2012. Les dimensions individuelles et organisationnelles liées à l'intégration du DG sont analysées sur une période de 15 mois. La cueillette des données s'appuie essentiellement sur deux sources : des entrevues auprès de diverses instances et une analyse documentaire. Le nombre total des entrevues réalisées est de six d'une durée de près de deux heures chacune, de sorte que le temps compilé représentant la somme des entretiens auprès de la DG est estimé à dix heures. De plus, les membres de son équipe de direction (n=3D9) ont également été invités à participer à une entrevue individuelle. La démarche d'analyse s'est composée d'étapes successives réalisées de façon itérative, notamment puisque le phénomène étudié requiert la prise en compte des significations construites par les membres de l'organisation et le leader. L'analyse des événements clés a été reproduite sous une forme matricielle avec d'une part, le moment dans le temps et d'autre part, l'évènement dont il est question et son impact quant au processus d'intégration. Les thèmes et événements clés ont ensuite été insérés dans une grille de transcription des résultats, construits à l'aide du modèle conceptuel intégrateur, à partir desquels s'effectue l'analyse des données dans le but de répondre aux objectifs fixés dans le cadre de l'étude. Dans le cadre de cette étude, une attention particulière a été portée au niveau de la dimension individuelle du nouveau leader (à noter ici qu'il s'agit d'un successeur externe), qui comprend les caractéristiques personnelles du leader, ainsi que ses représentations de son rôle de DG et ses « a priori » à propos de l'organisation. L'analyse des différentes phases d'intégration a permis de mettre en évidence que ces éléments ont influencé de façon significative le processus d'entrée en fonction et la trajectoire d'intégration poursuivie. Dans cette étude de cas, cette trajectoire s'est principalement traduite, tout au long de période étudiée (15 mois), par un processus d'intégration sous la forme d'accommodation. Par ailleurs, certains indices laissent entrevoir que cette accommodation a permis de poser des jalons pour une transformation à venir. À la lumière de la révision des écrits et en fonction des objectifs de cette étude, nous avons proposé un modèle conceptuel intégrateur, inspiré des travaux de Denis J.-L. et coll. (2000). Ce modèle a constitué le point d'appui principal sur lequel divers éléments ont été ajoutés afin d'en arriver au modèle intégrateur. Ces éléments additionnels consistent en l'attention particulière portée sur les caractéristiques propres du leader et à l'incorporation d'un quatrième médiateur de la dynamique d'intégration, la construction de la confiance. Un nouvel élément est proposé au modèle intégrateur : un cinquième élément constitutif est proposé au modèle intégrateur au niveau de la variable « nouveau leader », soit : le capital social et la capacité de mise en réseau. Jusqu'à maintenant, malgré la complexité associée à l'adéquation entre les représentations d'un nouveau leader et l'organisation, l'entrée en fonction d'un nouveau DG au sein d'une organisation de santé québécoise s'avère très peu documenté. L'utilité de cette étude est donc incontestable. Sur le plan des connaissances scientifiques, cette étude contribue à accroître les connaissances relatives à la documentation de l'apprentissage du rôle de DG et de son entrée en fonction dans une organisation de santé québécoise. Par l'éclairage qu'elle apporte à l'égard de ces aspects, cette étude permet d'enrichir une analyse réflexive en y intégrant notamment la dimension d'ordre individuelle en lien avec les notions acquises. À la lumière des résultats obtenus, nous proposons un cadre conceptuel intégrateur bonifié.

Co-Author(s): **Lise Lamothe**, Faculté de santé publique, Université de Montréal; **Laurent Duchastel**, Université de Montréal, HEC, ENAP

Research Methods

Johnston (Convention Level)

Méthodes de recherche

Johnston (Niveau « Convention »)

D7.1 Estimating Completeness of Administrative Health Databases for Ascertaining Chronic Disease Cases: A Numeric Example with Parkinson's Disease

Presented by **LISA LIX**, Professor, University of Manitoba

To apply capture-recapture statistical models to estimate the number of missed cases of Parkinson's disease from administrative health databases, focusing on data loss that arises because non-fee-for-service physicians may not consistently record their patient encounters. To estimate the bias in Parkinson's disease prevalence estimates due to incomplete physician billing claims. Administrative health data were from the province of Saskatchewan for fiscal years 2004/05 to 2008/09. Physician billing claims, hospital discharge abstracts, and insured resident registry records, were linked to define annual cohorts (18+ years) with a ICD-9 or ICD-10-CA diagnosis of Parkinson's disease. Cohort members were classified based on the ascertainment data source(s), including hospital discharge abstracts, billing claims of physicians remunerated by fee-for-service methods, and billing claims of physicians remunerated by non-fee-for-service methods. Capture-recapture log-linear regression models with and without covariates (i.e., age, gender, comorbidity) were used to estimate missed cases. The number of prevalent Parkinson's disease cases ascertained from Saskatchewan's administrative health databases increased from 3,640 cases in 2004/05 to 3,787 cases in 2008/09, representing a prevalence of 523 per 100,000 population (18+ years) in the latter year. The majority of cases (79.5%) were ascertained solely from billing claims submitted by fee-for-service physicians. The number of cases ascertained from billing claims submitted by non-fee-for-service physicians increased from 7.33% to 9.55% over the study period. Accordingly, the number of missed cases was estimated to increase from 8.7% to 10.9% in 2004/05 to 10.9% in 2008/09 in capture-recapture models with covariates, giving an estimated prevalence of 557 per 100,000 population in 2008/09. Administrative health databases may underestimate chronic disease prevalence because of data loss for non-fee-for-service physicians who do not submit billing claims. Predictive statistical models can result in increased ascertainment rates. Further research is needed to evaluate model validity and generalizability for other chronic diseases.

D7.2 Assessing the validity of diagnostic codes in a cohort of diabetics admitted to hospital in Quebec between 2000 and 2011

Presented by **RENEE CARTER**, M.Sc., McGill University

In a cohort of diabetics admitted to hospital following an emergency department visit in Quebec between 2000 and 2011, we aim to: 1. Validate diagnostic codes in physicians' claims data for diabetes complications. 2. Describe trends in diagnostic codes pre/post the conversion to ICD-10-CA in hospital discharge abstracts in 2006. Our diabetes cohort was defined using a validated algorithm. Diagnoses from hospital discharge abstracts are coded by archivists and are considered a gold standard to validate our cohort's physicians' claims data. Using CIHI conversion files, all diagnoses coded with ICD-10-CA in hospital discharge abstracts since 2006 were converted to correspond to ICD-9 codes. Sensitivity and specificity will be calculated to assess the validity of ICD-9 codes 2500 to 2509. We will also assess fluctuations in coding trends before and after the ICD-10-CA conversion in 2006. All analyses will be stratified by regional category. Analyses will be completed by mid-February. Greater precision in the diagnostic information contained in hospital discharge abstracts versus physicians' claims data is well documented. We expect the sensitivity and specificity of certain ICD-9 codes to differ as a function of complication severity. This may inform researchers on which diabetes complications can be isolated for health outcome analyses while preserving internal study validity. Our results may also vary by region if factors such as the availability of human resources and health services influence coding practices. Furthermore, the conversion to the ICD-10-CA alpha-numeric coding system in 2006 may have ramifications for health researchers using the ICD-9 to study diabetes complications over time. Imperfect conversions can threaten the comparability of diagnoses and may produce biased outcome measurements. Administrative data offers opportunities to study health outcome indicators on a population level. Assessing the validity of diagnostic codes in a cohort of patients with an ambulatory care sensitive condition like diabetes, can inform research in a number of areas including epidemiology, disease surveillance, health services research, and health economics.

Co-Author(s): **Céline Plante**, Institut national de santé publique du Québec; **Louis Rochette**, Institut national de santé publique du Québec; **Amélie Quesnel-Vallée**, McGill University

D7.3 The importance of Methodology in Reporting Performance Indicators

Presented by **MAGGIE (JIAYAN) CHEN**, Cancer Care Ontario

The aim of this research is to use two public reporting methods to compare and contrast institutional performance by analyzing, as an example, a patient satisfaction indicator, namely, percentage of patients who would definitely recommend the emergency department (ED) to their friends and family. There are a multitude of ways to evaluate hospital results on patient satisfaction in ED. A standard approach sets a target to gauge hospital performance. Values above the target/benchmark meet or exceed expectations, while those institutions below the target may consider initiatives and programs to improve their patient satisfaction score. An alternative method is the use of funnel plots that assess the relationship between the outcome measure (patient satisfaction score) and volume of cases across disparate facilities when evaluating institutional performance. Allowances are made for hospitals falling within a band, called control limits, that adjusts for precision. From April 2010 to March 2011, 99 Ontario hospitals reported their scores of a NRC-Picker patient satisfaction survey question. A funnel plot was constructed using a benchmark (70.6%). The percentage responding favorably to the survey was plotted on the Y-axis, and precision or sample size on the X-axis. In all, 45(45%) institutions performed within expected variation, that is within or above the 99.8% control limit, and 54(55%) fell below the lower 99.8% control limit. When we simply use the 70.6% target without any control limits, 19 facilities exceeded the threshold, while 80 fell below it. Divergence in reporting occurred where 26 institutions met the 99.8% control limits set by the funnel plot, but fell below the benchmark set when using a fixed target of 70.6%. The two approaches lead to different conclusions on hospital performance for 26 (26%) institutions. The first method compared hospital scores against a target or preset benchmark while the second approach used funnel plots to interpret institutional performance with greater precision by taking into account variation via sample size.

Co-Author(s): **Carey Levinton**, Health Quality Ontario

D7.4 A novel method of adverse event detection can accurately identify venous thromboembolism (VTE) events from electronic health record data

Presented by **CHRISTIAN ROCHEFORT**, Assistant professor, McGill University

Venous thromboembolisms (VTE), which are composed of deep vein thrombosis (DVT) and pulmonary embolism (PE), are associated with significant mortality, morbidity and cost in hospitalized patients. The objective of this study was to determine the accuracy of using automated methods for identifying DVTs and PEs from electronic health record data. We randomly selected 4,000 electronic radiology reports among all diagnostic tests that were performed for a suspected VTE event at the McGill University Health Centre in 2011 and 2012. We manually identified DVTs and PEs within the narrative radiology reports, which served as our reference standard. Then, two automated algorithms were developed (one for DVT, one for PE) by applying natural language processing and machine learning techniques on 75% of the coded reports (development set). Then, the accuracy of these algorithms was assessed. Lastly, the algorithms were validated on the remaining 25% of the data (validation set) and their accuracy assessed. On manual review, 660 reports were positive for DVT (508 in the development set; 152 in the validation set) and 272 were positive for PE (152 in the development set; 74 in the validation set). In the development set, the DVT algorithm achieved a sensitivity of 0.94 (95%CI: 0.91-0.96), specificity of 0.92 (95%CI: 0.90-0.93), and positive predictive value of 0.70 (95%CI: .67-.74). In the validation set, sensitivity decreased to 0.92 (95%CI: 0.87-0.95) and specificity remained 0.92 (95%CI: 0.90-0.94). As for the PE algorithm, in the development set, sensitivity was 0.88 (95%CI: 0.83-0.92), specificity was 0.98 (95%CI: 0.97-0.98) and PPV was 0.76 (95%CI: 0.70-0.91). In the validation set, the sensitivity of the PE algorithm increased to 0.91 (95%CI: 0.82-0.95) and specificity decreased to 0.96 (95%CI: 0.94-0.97). The results of this study suggest that VTEs can accurately be identified from electronic health record data. The algorithms developed and validated in this study could help hospital quality improvement staff in monitoring VTEs, and in evaluating the effectiveness of interventions aimed at reducing their incidence.

Co-Author(s): **Zhe Tian**, McGill University; **Aman Verma**, McGill University; **David Buckeridge**, McGill University

Panel Presentation

Toronto Ballroom III (Convention Level)

Présentation en Panel

Toronto Ballroom III (Niveau « Convention »)

E1.1 Challenging Health System Leaders to Align Optimal Scopes of Practice and Innovative Care Models to Enable Health System Transformation in Canada

Presented by **IVY BOURGEOULT**, CIHR Research Chair in Health Human Resource Policy, University of Ottawa; **JEFF TURNBULL**, Chief of Staff, Ottawa Hospital; **SIOBAN NELSON**, Vice Provost, University of Toronto; **GILLIAN MULVALE**, Assistant Professor, McMaster University; **NOLA RIES**, Research Fellow, University of Alberta

Rationale for Panel: The panel reports on an extensive scoping review and knowledge synthesis commissioned by the Canadian Academy of Health Sciences and undertaken by investigators with the Canadian Health Human Resources Network. This panel will be the first step in launching a dialogue among Canadian health leaders and researchers. Participating panelists represent medical and nursing leadership, researchers in health human resources, health economics, and health law who can lead this important conversation among conference participants. The objective of this panel is to outline the key findings and recommendations of a scoping review of the scientific evidence and input from expert informants and health care leaders on how aligning optimal scopes of practice and innovative models of care can enable system-side transformation that better meets the needs of patients, communities and the Canadian population. Promising approaches to the optimization of health professional scopes of practice were identified using a systematic approach which involved four elements: 1) the development of a guiding conceptual framework of macro (education and training, economic context, legal and regulatory), meso (institutional, technology and community) and micro (practice level) factors of influence on scopes of practice; 2) a scoping review that identified 125 published and unpublished sources from which key findings were extracted using a tool to systematically map out the state of knowledge; 3) interviews with 50 key informants to augment findings from the literature; and 4) meetings over an 18-month period of an Expert Panel of the Canadian Academy of Health Sciences to discuss the state of the evidence and policy implications. Our analysis of scopes of practice innovations reveals their common characteristic is the circumvention of largely macro level structural barriers. The literature, however, focuses largely on micro rather than meso and macro system interventions. We did, however, find a consensus that scopes of practice that accommodate evolving models of care represent a significant tool to shift from individual, siloed practice to collaborative care. Clearly defined roles would need to be delineated within the team based on need and ability (training and experience) in order for the collaborative care arrangements to achieve their collective goals and targets. New accountability approaches would be required that combine individual and collaborative accountability and that offer a balance between self-regulation and accreditation of collaborative care arrangements. This will require flexibility in roles and scopes of practice to meet the needs of communities and financial alignment between resources, tasks and outcomes. The recommendations call for the mobilization of collective leadership to address structural factors that support rather than hinder the development and proliferation of innovative and flexible models of care that optimize health professional scopes of practice.

Panel Presentation

Tom Thompson (Convention Level)

Présentation en Panel

Tom Thompson (Niveau « Convention »)

E2.1 The state-of-the art in policy-focused knowledge translation

Presented by **MICHAEL WILSON**, Assistant Professor, McMaster University; **KAELAN MOAT**, Lead, Health Systems Evidence, McMaster Health Forum; **ALISON PAPRICA**, SPOR Network; **ULYSSES PANISSET**, Coordinator, Research and Knowledge Translation, World Health Organization; **JOHN LAVIS**, Professor, McMaster University

Background Supporting evidence-informed policymaking requires the creative interplay of, on the one hand, the best available data and research evidence and, on the other hand, the tacit knowledge and views and experiences of those involved in or affected by a particular issue. Significant progress has been made towards this end, and this panel will provide an overview of several 'state-of-the art' approaches to policy-focused knowledge translation (KT) as well as Canadian and international policymaker perspectives about how and why each of the approaches are important. Specifically, the presentations included as part of this panel will provide insight into the development and evaluation of: 1) evidence briefs and stakeholder dialogues (a 'full-serve' approach KT intervention that provides government officials, professional and community leaders, patients/citizens and researchers with the opportunity to bring their tacit knowledge and their own views and experiences to bear on a pressing health system problem, three options to address it, and implementation considerations) 2) citizen panels (a mechanism for providing citizens with the opportunity to share their views and experiences on high-priority issues) 3) rapid-response programs (designed to fill the gap between 'self-serve' and 'full-serve' KT interventions by providing a synthesis of research evidence over a three-, 10- or 30-business day time frame); 4) one-stop shops (a 'self-serve' KT intervention that provides 'one-stop-shopping' for the best available research evidence about health systems) 5) capacity building (an online training program that provides policymakers and stakeholders with the skills to find and use research evidence) Part 1 - Presentations about 'state-of-the art' policy-focused approaches to KT A) Evidence briefs and stakeholder dialogues Presenter: Michael Wilson, Assistant Director, McMaster Health Forum; Assistant Professor, Department Clinical Epidemiology and Biostatistics, McMaster University B) Citizen panels Presenter: François-Pierre Gauvin, Lead, Evidence Synthesis & Francophone Outreach, McMaster Health Forum C) Rapid-response programs Presenter: Michael Wilson, Assistant Director, McMaster Health Forum; Assistant Professor, Department Clinical Epidemiology and Biostatistics, McMaster University D) One-stop shops and capacity building Presenter: Kaelan Moat, Lead, Health Systems Evidence, McMaster Health Forum Part 2 - Policymaker Perspectives Two discussants will offer insights into how and why each of the policy-focused approaches to knowledge translation are important for supporting evidence-informed health systems both in Canada and internationally. A) A Canadian policy perspective about how and why each of the approaches are important Presenter: Michael Hillmer, Director, Planning, Research and Analysis Branch, Ontario Ministry of Health and Long-Term Care B) An international policy perspective about how and why each of the approaches are important Presenter: Ulysses Panisset, Coordinator, Research and Knowledge Translation, World Health Organization.

Panel Presentation

Osgoode (3rd Floor)

Présentation en Panel

Osgoode (3^e étage)

E3.1 Improving palliative care provincially: Policy and research initiatives at four levels

Presented by **HSIEN SEOW**, Cancer Care Ontario Research Chair in Health Services Research, McMaster University; **DENISE MARSHALL**; **JEFF MYERS**, Head of Palliative Care Division, Sunnybrook Hospital; **SARA UROWITZ**, Manager, Palliative Care, Cancer Care Ontario; **JAMES MELOCHE**, Senior Director, System Design and Implementation, Central LHIN

Palliative care is care that improves the quality of life for patients who are dying by relieving symptoms and addressing psychosocial issues. Numerous studies report the burden on patients without effective palliative care, such as uncontrolled pain and symptoms, poor quality of life, and potentially avoidable hospitalizations. Moreover, patients in the last year of life are the most expensive in the healthcare system, costing Canadians an estimated \$11 billion annually, with hospitalizations comprising over 70% of end-of-life costs. Because of the growing aging population, there are increasing numbers of older adults dying from multiple comorbidities, which will increase the demand for palliative care services on the health system. Thus, delivering effective, integrated, palliative care is an important health system priority in Canada. In 1999, the Canadian government declared quality palliative care as a right of every Canadian. Yet poor quality services and health systems persist as reported in several provincial and federal reports throughout the past decade. Clearly, improving palliative care requires research and policy advancements from multiple stakeholders working in different settings and at different levels of influence. This panel will present updates on research and policy initiatives in Ontario designed to improve palliative care presented from four different perspectives: 1) policymakers, 2) provincial quality measurement initiatives, 3) palliative care providers, and 4) academics. They cover four levels: the provincial government, regional health authorities, hospitals, and community-based care. A policymaker will discuss different initiatives the Ministry of Health has supported in the recent years to develop a consensus vision for high-quality, high value, palliative care in Ontario, and the goals and results in achieving the broader vision. A provincial lead will discuss the success and challenges of leading a consensus-driven process to develop a list of palliative care quality indicators aimed to guide performance, accountability and reporting. A physician will discuss how one academic hospital has focused on improving palliative care at an institutional level, and the use of patient-reported outcomes to drive change. An academic will discuss the impact of interdisciplinary, community-based palliative care teams, and what was learned when trying to understand what the teams do to improve quality, and how to develop, disseminate, and spread these teams broadly.

E4.1 Arthritis prevalence and health services use in the Métis population of Ontario

Presented by **SABA KHAN**, Epidemiologist, Institute for Clinical Evaluative Sciences; **STORM RUSSELL**, Métis Nation of Ontario

Arthritis is a significant cause of morbidity in the Canadian Aboriginal population, yet little is known about arthritis in the Métis. This study examined prevalence and health services use related to osteoarthritis and rheumatoid arthritis in the Métis population of Ontario, compared to the rest of the provincial population. The Métis Nation of Ontario Citizenship Registry was linked to health administrative databases in order to identify Métis persons with osteoarthritis and rheumatoid arthritis (based on case definitions from the Public Health Agency of Canada) between fiscal years 2006 and 2010. We calculated person-visit rates for physician visits, emergency department (ED) visits and hospitalizations for each disease group, one year following diagnosis. Age- and sex-standardized prevalence and health services use rates were compared between the Métis and the general Ontario population. Between fiscal years 2006 and 2010, the age- and sex-standardized prevalence of osteoarthritis was significantly higher in the Métis population compared to the general Ontario population (20.13 vs. 16.37 cases per 100 persons), while prevalence of rheumatoid arthritis was similar between the two populations (1.10 vs. 0.91 cases per 100 persons). Métis with osteoarthritis had significantly higher rates of physician visits (87.72 visits per 1000 PY) and ED visits (1.93 visits per 1000 PY) than other Ontarians with osteoarthritis (71.78 physician visits and 1.03 ED visits per 1000 PY, respectively). Métis with rheumatoid arthritis also had significantly higher ED visit rates than their non-Métis counterparts (0.43 vs. 0.1 visits per 1000 PY). Osteoarthritis has a significantly higher burden on the Métis population of Ontario. Métis with osteoarthritis have high ambulatory and emergency department use after diagnosis, indicating a need for better disease management.

Co-Author(s): **Elizabeth Badley**, Institute for Clinical Evaluative Sciences; **Nathaniel Jembere**, Institute for Clinical Evaluative Sciences; **Yvon Allard**, Metis Nation of Ontario; **Storm Russell**, Metis Nation of Ontario

E4.2 Walking the Prevention Circle: Bearing Witness to an Indigenous Process for Knowledge Sharing

Presented by **SAMANTHA YAMADA**, Doctoral Student, York University

Walking the Prevention Circle (WTPC) is a community-capacity building program developed by and for Indigenous people with the aim of preventing violence in communities. This program offered a unique opportunity to collaboratively study the elements and processes of effective knowledge sharing in an Indigenous context. Together with the leaders of WTPC, we aimed to identify the elements and processes of effective knowledge sharing in the program. We explored the types of knowledge being shared, the process of sharing knowledge, and the tailoring of program content and process. Qualitative data was gathered through interviews with nine facilitators who had different levels of experience in delivering the program and who came from across Canada. The implementation of the program in one community was also observed. Interview and observation data were analysed using inductive thematic analysis with the assistance of an independent Indigenous research assistant. The findings of this research confirm the importance of aligning the content and process of knowledge sharing with the unique aspects of an Indigenous context. Understanding the impact colonization has had on the health and behaviours in Indigenous communities and the lack of safety around sharing knowledge in Indigenous contexts is key. This understanding has implications for who can safely participate in the knowledge sharing process (e.g., facilitators who self-identify as Indigenous). Additionally, the role of having and tailoring knowledge is shared between the facilitator and participants in ways that emphasize and validate the expertise of participants. The attunement and responsiveness of facilitators to the historical and local context of the participants creates a paradigm shift that challenges the historically unsafe process of sharing knowledge. Knowledge sharing in WTCP is characterized by a decolonizing approach aimed to counter the layers of colonial harm with layers of safety. This process takes place within an attuned and responsive relational stance taken by the facilitators that reflects humility and a valuing of the knowledge already in communities.

Co-Author(s): **Shelley Cardinal**, Aboriginal Advisor, The Canadian Red Cross

E4.3 National Alcohol Policy Guidelines for First Nations - Clash of Cultures or Policy with Potential?

Presented by **CAROL HOPKINS**, Executive Director, National Native Addictions Partnership Foundation

In 2010, the Canadian Centre on Substance Abuse released Canada's new drinking guidelines, supported by a world-wide body of evidence that suggests increased minimal drinking guidelines reflect Canada's Culture of Moderation. But what is the potential impact of these guidelines with First Nations where abstinence is promoted? This presentation looks at the unique considerations of a one-size-fits-all approach to national drinking guidelines, specifically with First Nations in Canada who are challenged by alcohol differently than mainstream. The new and current policy ignores First Nations social determinants of health, instead emphasizing mainstream's 'culture of moderation,' with First Nations' concerned with how this may negatively reinforce consumption over abstinence. The presenter will guide the audience through the process that led to the development of the national drinking guidelines, and how First Nations expertise became involved to better inform the process. Despite the challenges and opportunities, partners developed an appreciation for how evidence needs to come from First Nations, that it be developed from a strength based perspectives and be adequately informed on the role trauma continues to play in communities. Ultimately, these efforts will lead to developing a position statement on First Nation Alcohol Use in Canada, ensuring it reflects a First Nations perspective on a culture of abstinence, as counterpoint/balance to mainstream's culture of moderation.

E4.4 Negotiating barriers, navigating the maze: First Nation peoples' experience of medical relocation

Presented by **JOSÉE G. LAVOIE**, Director, MFN-Centre for Aboriginal Health Research

This study aimed to document the policy framework that shapes the experience of Canadian First Nations relocating to urban centres to access medical care; and assess the effectiveness of this policy framework through experiences of First Nation patients and their families. Conducted in partnership with the Assembly of Manitoba Chiefs, we analyzed policy coverage rules, as reported on governmental websites and in key policy documents. We engaged government and health services representatives in two focus groups (N=3D 10, N=3D19) to explore the credibility of our analysis. In addition, a total of 95 interviews were conducted with First Nations patients experiencing medical relocation (N=3D28), family members of deceased patients (N=3D33), First Nations' community-based (N=3D6) and provincial healthcare providers (N=3D28). Sampling was purposive and theoretical. Findings show that the policy framework is complex, multijurisdictional, constantly shifting, and subject to continuous interpretations by program managers. Evidence from providers and patients suggests that policies are either not as inflexible as reported, that programs managers do have discretion, and/or that program managers balance the implementation of rules with the risks associated with advocates who may 'go public' and politicize refusals. Health providers, administrators, First Nation peoples and/or family members expend considerable time advocating for particular patients/families, perpetuating inefficiencies, frustration, distrust, uneven application of rules, unmet needs and inequitable results. Insufficient attention has been paid to how federal and provincial program managers negotiate the policy context of medical relocation, and make decisions on eligibility. This gap in knowledge has perpetuated First Nations' perceptions that the system is inherently set up to fail them.

Co-Author(s): **Sharon Mah**, University of Manitoba; **Joseph Kaufert**, University of Manitoba; **Annette Browne**, University of British Columbia; **John O'Neil**, Simon Fraser University

E5.1 Introducing patient-based funding into Ontario Hospitals: A complex task faced by leaders

Presented by **PAMELA BAXTER**, Associate Professor, McMaster University

Ontario hospitals are facing significant changes as they begin to shift from a traditional block-funding model to a patient-based funding (PBF) approach. The current study sought to understand Ontario health care leaders' early responses to the implementation of PBF and related quality-based procedures specific to joint replacement surgery. To achieve this study's objective a qualitative exploratory descriptive design was employed. Seventy hospital-based health care leaders (senior administrators, managers, program leads, and orthopaedic surgeons) involved with orthopaedic quality based procedures participated in one of seven 30-90-minute focus groups. Participants were asked to discuss their initial responses to the implementation of PBF and orthopaedic quality based procedures with regard to the following: 1) their general experiences, 2) barriers, challenges and facilitators encountered, and 3) strategies and/or innovations developed. Data underwent qualitative content analysis which involved labeling data, chunking data, and converging data chunks into themes. From the analysis three major themes emerged; 1) responding to change, 2) leading the change, and 3) managing the change. Within each of these themes barriers and benefits were identified. Health care leaders' early responses reveal a general commitment to see system changes that benefit the organization, the patient and the health care provider. However, leaders described concern about the complexity of the funding shift and its impact on the quality of patient care, data management, and costing. Implementation challenges included, a lack of lead time to develop implementation strategies, a lack of communication and education regarding the funding changes, a lack of decision support resources including a lack of consistent, accurate case costing data, and unanticipated demands on human and financial resources. This study provides insight into the health care leaders' experiences implementing PBF and quality based procedures. Further research is needed to, a) identify innovative care delivery models developed in response to PBF and, b) develop a framework to guide leaders charged with implementing future quality based procedures.

Co-Author(s): **Kim Alvarado**, Juravinski Hospital and Cancer Centre Hamilton Health Sciences; **Deborah Kennedy**, Holland Orthopaedic & Arthritic Centre Sunnybrook Health Sciences Centre; **Greta Cummings**, University of Alberta; **Colleen McKey**, McMaster University

E5.2 A Collaboration to support high quality early psychosis intervention in Ontario

Presented by **JANET DURBIN**, research scientist, Centre for Addicition and Mental Health; **CATHERINE FORD**, Senior Policy Advisor, Ontario Ministry of Health and Long Term Care

In 2011, the Ontario government released Early Psychosis Intervention (EPI) Program Standards in order to support consistent, high quality EPI program delivery. The Ministry initiated a collaboration with program stakeholders and researchers to support implementation of the Standards. This session will reflect on early experiences of the collaboration. The Ministry formed a Standards Implementation Steering Committee, with representation from a mature EPI stakeholder network, the LHINs, and researchers. The Committee has formal terms of reference and ongoing funding. Its first project was a province-wide needs assessment survey to provide a foundation for future improvement work. Feedback was obtained on current program practices in relation to six of 13 Standards, implementation challenges and needed supports. Large and small area programs were compared, given the difficulty of implementing complex interventions in rural areas. Dissemination strategies targeted various stakeholders to engage interest and identify next steps. The survey was completed by 21 small area and 31 large area programs. Uniformly challenging was community outreach for early detection and referral. Use of standardized, evidence based protocols was low. Small area programs reported lower implementation for over half of the program components. Knowledge translation activities targeted various audiences but follow-up indicated little individual program use of results for improvement or advocacy, and limited LHIN engagement. Based on the results, 'think tank' meetings are being held to identify improvement projects for community development and for use of standardized clinical protocols. A second needs assessment survey is addressing the remaining Standards, and a qualitative study is exploring family support approaches. This collaboration between government, program stakeholders and research aims to encourage uptake of evidence-based program Standards through sector driven quality improvement projects. The presenters will discuss this process, considering the role of the Standards, role of research, effectiveness of Implementation Committee, LHIN engagement, and sustainability.

Co-Author(s): **Catherine Ford**, Ministry of Health and Long-Term Care; **Karen O'Connor**, Canadian Mental Health Association; **Chiachen Cheng**, St. Joseph's Care Group

E5.3 Examining factors for specialist physician under-unemployment in Canada

Presented by **DANIELLE FRÉCHETTE**, Executive Director, Health Systems Innovation and External Relations, Royal College of Physicians and Surgeons of Canada; **CAROLE JACOB**, Royal College of Physicians and Surgeons of Canada

There have been signs and growing evidence that some newly certified medical specialists have had difficulties obtaining employment in their field. The main objective of this longitudinal study is to examine the factors underlying new medical specialist under/unemployment in Canada. A mixed method research design combining qualitative and quantitative approaches was applied. Fifty-one voluntary, confidential interviews were conducted with selected stakeholders including specialty and subspecialty medicine committee chairs and program directors, senior hospital leaders, postgraduate deans, medical and surgical residents, recent graduates, government officials and practicing medical specialists. Longitudinal quantitative survey data was collected since 2011 through an online survey administered to every new Royal College specialty and subspecialty certificant (N=3D2002 in 2011 and N=3D2231 in 2012 with response rates of 655(32.9%) and 713(31.9%) respectively). Driving factors are: (1) Economic: decreased hospital hiring, operating room time and resources; delayed retirements; (2) Health System/Structural: increased reliance on residents for call service and patient care reduces job openings; misalignment between workforce plans and residency intake resulting in some 'oversupply'; compensation models not incentivizing creation of positions; interprofessional care models/changing scopes of practice reducing the need for specialist positions; (3) Individual/Contextual: work location influencers include desire to be in the same city as spouse/partner and family members, and preference for a particular city or academic center; lack of career counseling. Summary profile of under-unemployed population: Most impacted specialists are from procedural disciplines; 16% new specialists reported employment challenges post-certification; additional training is sought as an alternative to unemployment or to be more employable. Ongoing research is needed to examine specialty and jurisdiction-specific variations in more detail to avoid, among others, over-correction in enrolment quotas. Strategies to address findings and identified data gaps require collaboration from educational, research and public sectors. A national strategy and institute, as exist in other countries should be considered.

E5.4 The impact of payment methods on professional equity of physicians

Presented by **JUAN-NICOLÁS PEÑA-SÁNCHEZ**, PhD Candidate, School of Public Health, University of Saskatchewan

Professional equity, evaluation of own contributions and rewards received compared to contributions and rewards of other physicians, has not been assessed according to payment methods. The aim of this study is to compare levels of professional equity among physicians paid by fee-for-service (FFS), alternative payment plans (APPs), and blended schemes. In 2011, medical practitioners in the Saskatoon Health Region, Saskatchewan, were surveyed using a questionnaire developed for physicians to measure professional equity. Intangible rewards were measured by the dimensions of fulfilment and recognition, and tangible rewards by the dimension of income. The three-dimensional structure of the questionnaire was first corroborated through a confirmatory factor analysis (CFA). Analyses of variances were performed to account for differences in the levels of professional equity. A linear regression model predicting levels of professional equity was used to test the interaction between specialty and payment method, controlling by number of patients, gender, and age group. In total, 382 (48.1%) physicians participated: 35.6% were family/general practitioners (FPs); 61% were clinical/surgical specialists; and, 3.4% were pathologists. The internal structure of the questionnaire was confirmed by the CFA. Thus, it was identified that physicians paid by FFS perceived lower professional equity than those paid by APP (p=3D0.005). Practitioners under APPs reported higher levels of income (p=3D0.03) and recognition (p=3D0.001) equity than those with FFS. FPs perceived lower fulfilment (p=3D0.003) and income (p=3D0.008) equity compared to medical-surgical specialists. Furthermore, higher levels of professional equity are predicted among FPs paid by APPs and blended schemes in comparison to FPs paid by FFS, when controlling for gender, age group, and number of patients seen per week. Higher levels of professional equity were perceived among physicians paid by APPs in comparison to those paid by FFS. Physicians paid by APPs reported that they receive fair economic rewards and appropriate recognition. APPs could be explored to improve the professional equity of FPs and, indirectly, promote improved primary healthcare.

Co-Author(s): **Rein Lepnum**, School of Public Health, University of Saskatchewan; **Roy T. Dobson**, College of Pharmacy and Nutrition, University of Saskatchewan; **David Keegan**, Department of Psychiatry, College of Medicine, University of Saskatchewan

Researcher & Decision Maker Pairs 2

Simcoe (Lobby Level)

Tandems chercheur-décideur 2

Simcoe (Réception de l'hôtel)

E6.1 Creating a National Strategy for Clinical Guidance Development and Dissemination for Influenza Pandemic

Presented by **JESS ROGERS**, Director, Centre for Effective Practice; **BARBARA RAYMOND**, Director, Pandemic Preparedness Division, Centre for Immunization and Respiratory Infectious Disease

To describe the process undertaken to understand the clinical guidance needs of end users (stakeholder organizations including decision makers and health care providers) during an influenza pandemic. To present the key components of a national strategy developed in response to extensive consultation and engagement of researchers, providers and decision makers. To offer insight in fostering collaboration between decision makers (from different levels in the health system), providers (from diverse settings) and research. An integrated approach was undertaken to develop and confirm a national strategy, including a handbook, for the development of high quality clinical guidance and a comprehensive knowledge translation plan for health care organizations and providers. A number of components were included in the approach to ensure appropriate engagement and exchange of information with target end users including: Literature review, Advisory Committee and Working Groups, organization level survey on communication capacity, provider level survey on information needs, stakeholder interviews and consultation meetings. Key success factors include: building from the lessons learned from previous influenza pandemics, understanding the information needs of the health system from decision maker to provider, leveraging existing capacity for guidance development and dissemination across organizations and anchoring the strategy on recognized methods for guideline development and KT. This project resulted in a deeper understanding of the true needs of both decision makers and providers with respect to not only information needs but also the ways in which they wish to be engaged in the process of developing clinical guidance and in disseminating it. Survey and interview data will be presented to demonstrate the findings. The final handbook outlines not only a strategy for this work but also a detailed process that has benefited from engagement, input and approval by diverse stakeholders committed to improving the quality of clinical guidance for influenza pandemic and in changing the way information is provided/distributed across the system. This project offered the opportunity to apply research knowledge to redefine a national process for the development of clinical guidance and the dissemination of the information across multiple target end users. It required active engagement from a large number of stakeholders with different perspectives, needs and capacities. The result of this integrated approach is a strategy that is aligned with the needs of the system and that is supported by stakeholders.

Co-Author(s): **Valerie Palda**, Centre for Effective Practice; **Maura Ricketts**, Canadian Medical Association; **Barbara Raymond**, Public Health Agency of Canada; **Jill Skinner**, Canadian Medical Association

E6.2 The Impact of Telemedicine Interventions for Individuals with Heart Failure(HF): A Network Meta-Analysis

Presented by **AHMED KOTB**, Epidemiologist, University of Ottawa Heart Institute

Telemedicine offers great promise in the delivery of rehabilitation services to individuals with heart failure who may be unwilling or unable to access to them. To determine impact of five main forms of telemedicine on the outcomes of death and hospitalization a systematic review and network meta-analysis were carried out. A systematic review and network meta-analysis of the evidence was conducted to compare the Systematic reviews examining the effectiveness of telemedicine for individuals with HF were identified using the following databases: The Cochrane Library, MEDLINE, EMBASE and CINAHL. Data from randomized controlled trials (RCTs) were then included in the network if they reported the outcomes of mortality, all-cause hospitalization and HF hospitalization for telephone support (TS), telemonitoring (TM), TS and TM combined, video monitoring, or electrocardiographic monitoring (ECG). Bayesian network meta-analyses using a binomial likelihood model and traditional frequentist pairwise meta-analyses were conducted. Eight systematic reviews were identified and thirty RCTs (N=10,193 patients) were included in the analysis. Compared to usual care (UC), only TS [Odds Ratio (OR) 0.80 and 95% Credible Intervals (CI) (0.66, 0.96)] and TM [OR 0.53 (0.36, 0.80)] reduced deaths. Compared to UC all of TS [OR 0.69 (0.56, 0.85)], TM [OR 0.64 (0.39, 0.95)] and ECG [OR 0.71 (0.52, 0.98)] reduced HF hospitalizations. No other comparisons were found to favour one form of telemedicine over the other. Cardiac rehabilitation can reduce the likelihood of deaths and further illness. Despite this, patient participation and compliance continues to be suboptimal. Telemedicine may serve as an effective means to supplement usual rehabilitative care. In this study, TS and TM interventions led to fewer deaths and hospitalizations than usual care alone.

Co-Author(s): **George Wells**, University of Ottawa; **Chris Cameron**, University of Ottawa; **Shuching Hsieh**, University of Ottawa Heart Institute

E6.3 Evidence that newborn weight curves should be customized for Canada's ethnic groups

Presented by **JOEL RAY**, Clinician-Scientist, St. Michael's Hospital

Women who migrate to Western nations generally deliver infants of lower birthweight than mothers originally born in that country. Whether this difference reflects a physiological or a pathological process is unclear. World region-specific (WRS) birthweight curves may more accurately classify newborns as small- (SGA) or large- (LGA) for gestational age. Thus, we determined if WRS curves better predict adverse neonatal and obstetrical outcomes than conventional Canadian curves. This population-based study comprised 328,387 singleton livebirths delivered between 2002-2012 to immigrant mothers in Ontario, Canada. Deliveries were linked to a national immigration database. Infants were classified as SGA (< 10th percentile) or LGA (≥ 90th percentile) on a birthweight curve for newborns of Canadian-born mothers, only SGA on a WRS birthweight curve, or not SGA on either. A similar approach was done for classifying LGA. We assessed neonatal outcomes that included neonatal death, and obstetrical outcomes that included obstructed labour due to shoulder dystocia and 3rd or 4th degree perineal lacerations, in relation to SGA or LGA classification by Canadian-born vs. WRS curves. Compared to non-SGA newborns, those considered SGA by the Canadian-born curve alone were at slightly higher risk of neonatal death (adjusted odds ratio [aOR] 1.60, 95% confidence interval [CI] 1.04-2.48), while those classified as SGA on the WRS curves were at much higher risk (aOR 14.74, 95% CI 12.32-17.64). Compared to non-LGA newborns infants, those classified as LGA on the WRS curves alone had a higher burden of obstetrical perineal laceration (aOR 1.63, 95% CI 1.50-1.78) and shoulder dystocia (aOR 4.71, 95% CI 4.33-5.13). WRS birthweight curves better predict adverse newborn and obstetrical outcomes than conventional curves. Adopting WRS curves in Western nations may help identify immigrant mothers and their newborns in need of special prenatal and postnatal care, while avoiding unwarranted interventions in others.

Co-Author(s): **Marcelo Urquia**, St. Michael's Hospital; **Marilyn Booth**, PCMCH

E6.4 Using Real-Time Measurement to Improve the Patient Experience for Cancer Patients in Ontario

Presented by **ALYSHA GLAZER**, Policy Research Analyst, Cancer Care Ontario

Cancer Care Ontario is assessing the patient experience and believes every cancer patient should have the opportunity to give feedback on their experience. CCO currently measures patient experience retrospectively and is developing and implementing a tool to measure patient experience in real-time, with results being used to drive quality improvement. A current state assessment was conducted to investigate the interest and readiness of CCO's regional partners in gathering feedback on patients experiences in real-time, at the point of care. Over 800 patients took part in regional focus groups in 11 of the 14 regions across the province; all 14 Regional Vice Presidents (RVPs) were interviewed; a targeted online survey was completed by 1-2 administrators with Patient Experience responsibilities in all 14 regions; and external consultations and a literature were conducted. The current state assessment revealed that 36% of the cancer centres in Ontario have ad hoc real-time measurement strategies and only 21% have utilized an electronic approach. Interest in a real-time measurement approach was overwhelmingly positive. Patients' responses were very favourable, with 94% of patients agreeing that measuring patient experience in real-time is important to them. Regional partners had a similar response, with 100% of RVPs in favour of an electronic real-time measurement approach. Furthermore, all 14 regions were in favour of moving forward with a province-wide real-time measurement strategy in the next year. Measuring patient experience is a key foundation to developing quality improvement initiatives. There is overwhelming support for the implementation of a real-time strategy to measure patient experience. The new approach will address the limitations of retrospective surveys and will help move the quality improvement agenda of healthcare organizations forward.

Co-Author(s): **Nancy Kraetschmer**, Cancer Care Ontario; **Esther Green**, Cancer Care Ontario; **Simron Singh**, Cancer Care Ontario

E71 Cost-effectiveness analysis of insured eye care services by optometrists in Prince Edwards Island (PEI): an example of diabetic

Presented by **HONG ANH TU**, Post-doctoral fellow, Institute of Health Policy, Management and Evaluation, University of Toronto

Optometric services for diabetic retinopathy (DR), including screening and treatment, by optometrists has been funded by Prince Edward Island government (PEI) since 2012. The objective of this analysis was to assess the cost-effectiveness of this optometric policy using the PEI government's healthcare payer perspective. A Markov cohort model of DR was developed using PEI data (diabetic incidence, DR incidence and mortality), cost data from PEI database, and data from the literature (utilities, DR progression). In the base-case, biannual DR screening was assumed. A hypothetical cohort of diabetic patients of ≥ 35 years old in PEI (8,392) was simulated to estimate expected lifetime health outcomes (non-proliferative, proliferative cases, mortality, quality-adjusted life years (QALYs)) and costs (screening cost, treatment of proliferation retinopathy). Primary outcomes were expected QALYs, cost and incremental cost per QALY gained. Extensive sensitivity analyses were conducted. QALYs and costs were discounted at 5%. In the base-case biannual screening and treatment of DR for diabetic patients 35 years and older in PEI provided by optometrists was a cost-saving strategy compared to the service delivered by GPs. The model was most sensitive to the health utility of diabetic patients and to sensitivity of tests provided by optometrists, and compliance/screening rate provided by the GPs. Varying the discount rate from 0 to 5% had the least impact on the cost-effectiveness of screening results. In all screening scenarios (biannual, annual, biennial scenarios), services provided by optometrists appeared to be very cost-effective or even cost-savings compared to services delivered by the GPs. The estimated potential financial savings to PEI government could be between C\$45,000 to C\$390,000 over a 1 year to 10-year horizon. Screening and treatment of DR provided by optometrists in PEI is a cost-saving strategy compared to usual care. The potential savings to the PEI government could amount to C\$390,000 in 10 years. This economic evidence informs the most recent funding policy for optometric services in PEI.

Co-Author(s): **Kednapa Thavorn**, Li Ka Shing Knowledge Institute, St. Michael's Hospital; **Yaping Jin**, Department of Ophthalmology, University of Toronto; **Graham Trope**, Department of Ophthalmology, University of Toronto

E72 New genomic technologies: clinical utility and resource planning

Presented by **ROBIN HAYEEMS**, Scientist, The Hospital for Sick Children Research Institute

Interpretive complexities associated with new genomic testing strategies present diagnostic, management, and resource challenges. We aimed to identify associations between patient characteristics and medical recommendations following pediatric chromosome microarray (CMA) in order to generate evidence related to clinical utility and to inform resource planning. Using a historical cohort design, we extracted data from medical records of children who pursued CMA in a pediatric tertiary care centre during 2009-2011. CMA was ordered to determine genetic etiology of presenting congenital anomalies (CA) and/or developmental delay (DD). Of the 1931 children who met inclusion criteria, 457 (23.7%) carried a genomic variant of clinical or uncertain significance and 1474 carried benign or no variants (76.3%). All children with variants of clinical or uncertain significance and a random sample of 295 children with benign/no variants were reviewed. The primary outcome was new medical recommendations following microarray result reporting. Medical recommendations (i.e. specialist referral, medical imaging, laboratory investigations, surveillance, family investigations) were provided for 548/752 children (72.8%). On average, 4.6 recommendations were provided per child. Binomial log link regression analyses indicate that clinically significant microarray results are associated with increased management recommendations compared to benign/no variant results [RR=1.34; 95%CI (1.22, 1.47)] but management recommendations are only slightly increased among those with variants of uncertain significance compared to benign results [RR=1.19; 95% CI(1.07,1.33)]. In addition, age 1-5 years is associated with fewer management recommendations compared to children <12 months [RR=0.75; 95% CI (0.69,0.82)]. Of all recommendations, 40.8% called for specialist consultation, 32.5% for imaging, 17.2% for laboratory investigations, 4.5% for surveillance protocols, and 4.9% for family investigations. Genomic variants of clinical significance drive pediatric medical management. Variants of uncertain significance drive management only marginally, compared to benign variants; this warrants further study with respect to clinical utility. Specialists will need to respond to children with variants of clinical significance; this will require targeted capacity building.

Co-Author(s): **Ny Hoang**, Hospital for Sick Children; **Cheryl Shuman**, Hospital for Sick Children; **James Stavropoulos**, Hospital for Sick Children; **Rosanna Weksberg**, Hospital for Sick Children

E73 Cost-Utility Analysis of Automated External Defibrillators in Office Settings

Presented by **KAILEAH MCKELLAR**, Student, Institute of Health Policy Management and Evaluation, University of Toronto; **ROSANRA YOON**, University of Toronto; **JEFFREY HARRIS**, University of Toronto

More than 40,000 sudden cardiac arrests occur annually in Canada, with mean survival rates of 5%. Automatic external defibrillators (AEDs) are effective in increasing the survival rates of those suffering a sudden cardiac arrest; however, the cost-effectiveness of AEDs in office settings has yet to be examined. This study assessed whether AEDs are cost-effective in office settings, specifically in administrative buildings of two federal government departments. We conducted a cost-effectiveness analysis from the employer perspective to determine the incremental costs per QALY gained associated with implementing AEDs together with CPR, compared to CPR training alone in 658 Federal Government office buildings. The calculated incremental cost-effectiveness ratio (ICER) was based on an 8-year time horizon. One-way and probabilistic sensitivity analyses were performed to account for uncertainty in the input parameters used in the model. The calculated ICER was \$874,214/QALY, which exceeds the commonly used willingness-to-pay threshold of \$50,000/QALY. One-way sensitivity analysis showed that the ICER was most sensitive to the likelihood of survival to discharge after sudden cardiac arrests, the length of the AED program and the AED unit costs. Results illustrated a high degree of certainty that while AEDs are more effective and also much more costly than CPR alone, and in no scenario did the ICER approach the \$50,000/QALY threshold. These results are comparable to other economic analyses of AED access programs. The main factors accounting for AED cost-effectiveness are the likelihood of a sudden cardiac arrest occurring in the location of interest and the number of AEDs required. Cost-effectiveness of AED is highly dependent on the setting in which they are installed. This paper addresses a call for cost-effectiveness analyses for AEDs in office settings. The ICER exceeded the usual threshold; therefore the program would likely exceed the Federal Government's willingness-to-pay. Providing AEDs in the office setting is unlikely to offer good value for money.

Co-Author(s): **Jeffrey Harris**, University of Toronto; **Kaileah McKellar**, University of Toronto; **Rosanna Yoon**, University of Toronto; **John Murphy**, Resource Environmental Associates; **Rebecca Hancock-Howard**, Ministry of Health and Long-Term Care; **Peter Coyte**, University of Toronto

E74 The Cost Effectiveness of Metered-Dose Inhalers with Spacers versus Wet Nebulization for Salbutamol Inhalation

Presented by **PAUL SPIN**, PhD Candidate, Dalhousie University

Despite evidence demonstrating the advantages of salbutamol inhalation by metered-dose inhalers (MDI) with spacers, nebulization remains the dominant method of asthma treatment among children in some emergency departments. The objective of this study is to evaluate the cost effectiveness of MDI with spacers relative to wet nebulization. A bootstrapping approach was used to examine the empirical distribution of costs, admissions, and incremental cost-effectiveness ratios (ICERs) of MDI with spacers versus wet nebulization, using patient-level data from a retrospective cohort study. The bootstrapping procedure was adapted to permit a probabilistic simulation of the unit cost and resource use values. Hypothesis tests about the cost effectiveness of MDI with spacers were evaluated by constructing cost-acceptability curves, which plot the probability that MDI with spacers are cost effective relative to an externally-set willingness to pay (WTP) for an averted admission. =A0 Compared to MDI with spacers, wet nebulization was associated with an 8% point increase in probability of admission and an additional \$492 per patient visit. MDI with spacers dominated (i.e. was more effective and less costly than) wet nebulization in 87% of bootstrapped replicates. MDI with spacers was cost effective in 90-95% of replicates over WTP parameters of \$1,000-\$3,000 per discharged patient. Baseline results were robust to alternative scenarios. Specifically, the sensitivity of the baseline results was tested by increasing the MDI cost parameters, while holding wet nebulization cost parameters equal to their baseline values. In this experiment, MDI with spacers was cost effective in 80-85% of replicates across all WTP parameters. Consistent with evidence from randomized control trials, our results suggest economic gains associated with the use of MDI with spacers for salbutamol inhalation. Moreover, since the analysis relies on administrative data, it can be adopted to other facilities for a cross-jurisdictional account of the cost effectiveness of MDI with spacers.

Co-Author(s): **Katrina Hurley**, IWK Health Centre, Dalhousie University; **Ingrid Sketris**, Dalhousie University; **Courtney Ward**, Dalhousie University; **Kuan Xu**, Dalhousie University

Panel Presentation

Toronto Ballroom III (Convention Level)

Présentation en Panel

Toronto Ballroom III (Niveau « Convention »)

F1.1 Implementing Accountability in Health Care: Lessons Learned in Canada and the UK

Presented by **RAISA DEBER**, Professor, University of Toronto, IHPME; **ANDREA BAUMANN**, Professor, McMaster University; **STEPHEN PECKHAM**, Professor, London School of Hygiene and Tropical Medicine

A long-term study to examine the implications of production characteristics on approaches to accountability, both across Canada, and in the United Kingdom, to see to what extent the findings apply to other provinces in addition to Ontario, and to look at the advanced strengths and weaknesses of the various approaches to accountability. A CIHR funded PHSI study was conducted over 4 years, to examine Approaches to Accountability in a wide variety of health care sub-sectors. The follow up study in partnership with Health Council Canada, is looking at to what extent the results obtained, applied in other jurisdictions, both within Canada and internationally. Views from selected people through the Health Council of Canada were invited. Study of regulatory bodies across Canada was completed which incorporated cross jurisdictional analyses and feedback from professional regulatory bodies, the Health Council of Canada and experiences in the UK. The findings suggest that accountability is being seen as increasingly important. It is important to ensure that these benefits are realized while minimizing adverse unintended consequences. There are multiple bodies asking for similar information, but in different forms and smaller organizations, which may not have the resources needed to respond to these increasing requests for information are struggling. The UK example notes the tension between responding to local and national authorities. The production characteristics, measurability and controllability appear critical. This differs considerably by sub-sector. A major concern is that things that are less easy to measure may get ignored, even if they are essential to success. In the pan Canadian study, regulators felt that accountability was essential, yet they lacked a common definition, lacked resources to respond to multiple demands, and were concerned re maintaining independence. The bottom line is mixed. Accountability is important, and the steps toward it can help to ensure better quality care, and ideally both save resources and improve outcomes. Yet, poorly done, it can divert resources from crucial activities, erode support for what may seem like poorly conducted activities, and miss the forest for the trees.

Panel Presentation

Tom Thompson (Convention Level)

Présentation en Panel

Tom Thompson (Niveau « Convention »)

F2.1 Solutions in primary health care for high users of health services

Presented by **JEAN MIREAULT**, Chairman of the board and VP clinical affairs, MédiaMed Technologies (MMT); **KIM MCGRAIL**, Assistant Professor, School of Population and Public Health, Associate Director of the UBC Centre for Health Services and Policy Research, Senior Researcher, Statistics Canada, Associate, Centre for Clinical Epidemiology and Evaluation; **FRÉDÉRIK BURGE**, Family Physician and Research Director, Department of Family Medicine Dalhousie University; **WALTER WODCHIS**, Associate Professor, Healthcare Finance, Institute of Health Policy, Management and Evaluation, University of Toronto, Research Scientist, Toronto Rehabilitation Institute, Adjunct Scientist, Institute for Clinical Evaluative Sciences, Principal Investigator, Health System Performance Research Network; **EMILY MARSHALL**, Assistant Professor, Department of Family Medicine Dalhousie University (moderator)

In recent years, the care and management of high users of health care has emerged as a focal point for developing a sustainable health care system. Small population of patients, most often with complex and chronic conditions, consumes a disproportionate percentage of healthcare resources. The panel aim to discuss on the concept of high users, the challenge to design interventions for high users and solutions in PHC for high users.

Panel Presentation

Jackson (Convention Level)

Présentation en Panel

Jackson (Niveau « Convention »)

F3.1 The Bridging of Research and Policy by At Home/Chez Soi (AH/CS): A multi-site trial of Housing First for persons with a mental illness who are homeless

Presented by **STEPHEN HWANG**, MD, MPH, Centre for Research on Inner City Health in the Keenan Research Centre of the Li Ka Shing Knowledge Institute of St. Michael's Hospital; **PAULA GOERING**, RN Ph.D., Centre for Addiction and Mental Health, University of Toronto; **FAYE MORE**, Toronto Site Coordinator, Mental Health Commission of Canada

Over 200,000 Canadians are homeless annually with a major impact on the health and quality of life of individuals, families and communities. A recently completed, five-city trial sponsored by the Mental Health Commission of Canada followed over 2,000 participants for 2 years. It used an Integrated Knowledge Translation (IKT) approach to increase the likelihood of policy impact. This session will describe the project's methods, highlighting findings and IKT strategies that have informed funding decisions about sustainability. The scaling up of Housing First across Canada by the Homeless Partnering Strategy and the successful transition of AH/CS participants and programs in Ontario illustrate the challenges and complexity of bridging research and policy. This session was organized and sponsored by the CAHSR Mental Health Theme Group.

Health Quality & Safety 1

York (Lobby Level)

Qualité et sécurité des soins de santé 1

York (Réception de l'hôtel)

F4.1 The comorbidity pattern and the quality of diabetes care in Ontario

Presented by **YELENA PETROSYAN**, University of Toronto

This study aims to assess the association between the quality of diabetes care (frequency of glycosylated hemoglobin and LDL-cholesterol testing, and dilated eye exam) and presence of different types of comorbidities and to examine if this association is modified by continuity of physician care. This population-based retrospective cohort study identified all Ontarians aged 18 years and older with physician-confirmed diagnosis of diabetes types 1 and 2 using clinical administrative databases including hospital and ambulatory physician visits, in the period from 2007 to 2009. Patients were classified according to concurrent comorbidities defined as vascular or concordant, non-vascular or other clinically unrelated to diabetes, or as having both types of comorbid conditions. Quality of care was measured with the 3 standard diabetes care measures. The association of quality with concurrent comorbidities and continuity of care was evaluated using logistic regression. Among the study cohort of 861,354 diabetes patients, only 13.8% of diabetes patients lived without comorbidity, indicating that diabetes mostly occurs in conjunction with other conditions. Overall quality of diabetes care in Ontario was low in the period 2007-2009. As compared to diabetes patients without comorbidity, diabetes patients with both vascular and non-vascular comorbid conditions were significantly more likely to meet guideline recommended diabetes care measures. The presence of both types of comorbid conditions in diabetes patients was associated with highest odds of meeting recommended diabetes care measures compared with those with no comorbidity. Diabetes patients with and without comorbid conditions who had a regular healthcare provider were significantly more likely to meet the recommended diabetes care measures compared to those who did not. The study results show that comorbidity in diabetes patients was associated with superior diabetes care, regardless of comorbidity type. Future studies are required to evaluate how to best organize care for diabetes patients to maximize patients' quality of life, and clinical and functional outcomes.

Co-Author(s): **Walter Wodchis**, University of Toronto, HSPRN; **Susan Bronskill**, Institute for Clinical Evaluative Sciences; **Anna Kone**, Cancer Care Ontario; **Andrea Gruneir**, Women's College Research Institute; **Kednapa Thavorn**, Li Ka Shing Institute; **Colleen Maxwell**, School of Pharmacy, University of Waterloo; **YuQing Bai**, HSPRN

F4.2 Assessment of evidence gaps in glucocorticoid-induced osteoporosis: a systematic review

Presented by **M. AMINE AMICHE**, PhD Student, Leslie Dan Faculty of Pharmacy, University of Toronto

The American College of Rheumatology (ACR) released evidence-based glucocorticoid-induced osteoporosis treatment guidelines in 2010 and called for more efficacy data in younger subjects and for new therapeutic options. We aimed to update glucocorticoid-induced osteoporosis treatment efficacy data since the ACR systematic review. Using MEDLINE keyword searches, we updated a systematic review completed by ACR to identify all randomized controlled trials (RCTs) and extension trials that examined osteoporosis drug efficacy, through to September 2013. All studies that examined changes in bone mineral density (BMD) and/or fracture risk in patients on chronic oral glucocorticoid therapy were eligible. Studies that focused on cancer or transplantation patients were excluded. Study methods and outcomes were independently abstracted by two authors and summarized using descriptive statistics. We identified 8 studies: 7 RCTs (5 oral bisphosphonates, 1 denosumab, 1 raloxifene; all over 1-year) and 1 head-to-head extension trial (alendronate vs. teriparatide). The 5 placebo-controlled bisphosphonate trials confirmed prior efficacy with significant improvements in BMD, and some new evidence to support treatment among young adults. Denosumab and raloxifene trials documented glucocorticoid-induced osteoporosis treatment efficacy for the first time. Biannual injections of 60-mg or 180-mg denosumab improved the spinal and hip BMD after one year compared with placebo. The raloxifene trial showed efficacy in increasing spinal and hip BMD after one year of treatment with satisfactory safety profile. The extension trial documented better treatment efficacy with teriparatide with significant gains in BMD and significantly lower vertebral fracture risk compared to alendronate over 3 years. Despite some new evidence to support treatment efficacy of oral bisphosphonates, denosumab and teriparatide; overall, gaps in glucocorticoid-induced osteoporosis continue to exist. In particular, more data to support fracture risk reduction, long-term benefits and safety, and head-to-head treatment comparisons are needed.

Co-Author(s): **Jordan M. Albaum**, Leslie Dan Faculty of Pharmacy, University of Toronto; **Mina Tadrous**, Leslie Dan Faculty of Pharmacy, University of Toronto; **Suzanne M. Cadarette**, Leslie Dan Faculty of Pharmacy, University of Toronto

F4.3 Effectiveness of policies to improve diabetes care and outcomes: the case of British Columbia and Alberta

Presented by **MAUDE LABERGE**, PhD(c), University of Toronto

Diabetes is a highly prevalent condition in Canada which can be controlled with appropriate care management, particularly in primary care. This study aims to evaluate the impact of policy changes targeted at improving care and patient outcomes on diabetes hospitalizations in British Columbia and Alberta. We used a before-and-after design with longitudinal administrative data on physicians' claims and hospitalization records for diabetes from 1998/99 to 2009/10. For each year, the study population consisted of all the people under 75 years of age who were covered by their respective provincial health insurance plan and who had been diagnosed with diabetes in the two years prior to each study year. Regression analyses were conducted to study the effect policies related to diabetes care in primary care settings on the annual rate of hospitalizations for diabetes among diabetics in each province. Hospitalization rates for diabetes were decreasing since 1998 and continued to decrease after the reforms in both provinces. The rates in BC were lower than in Alberta. In 1998, the hospitalization rate for diabetes was 3.1% in Alberta and 1.6% in British Columbia compared to respectively 1.3% and 0.75% in 2009. In BC, the rate seemed to be plateauing just before the policy was implemented and then started to decrease again which suggests that the policy could have had a positive effect on reducing diabetes hospitalizations. In Alberta, the curve shows a steep decline from 1998 to 2003 and a slower decline subsequently. Regression results suggest that the period post-2003 is associated with a significantly lower hospitalization rate with a slower decline in BC. The hospitalization rates were already declining in both provinces before the reform. Thus, it is challenging to disentangle the decrease that could be attributable to policy changes. More research is needed to better understand the impact of changes in primary care on outcomes like hospitalizations for diabetes.

Co-Author(s): **Anna Josette Koné**, Health System Performance Research Network

F4.4 Managing the Seams: Care Transitions for Older Hip Fracture Patients

Presented by **PAUL STOLEE**, Associate Professor, University of Waterloo

During transitions across health care settings, the quality and continuity of care is often challenged by involvement of multiple health professionals, inadequate information sharing and communication, and interactions between formal and informal care networks. We explored the care transition experiences of frail older hip fracture patients Guided by an ethnographic approach, semi-structured interviews (n=171), observations and document reviews were completed with hip fracture patients (n=23), family caregivers (n=19), and health care providers (n). Data collection using these methods was conducted at each transition point along the care continuum, at three Canadian study sites (large urban, mid-size urban, rural). Thematic analysis was conducted using NVivo. Across all three study sites, analysis revealed that care transitions were challenged by: inadequate information sharing within and between health care settings; missing, late or unnecessary documentation; lack of interoperability of electronic systems; and limited communication with patients and caregivers (who are the 'common denominator' for information sharing across the care system). Benefit was observed in situations where patients or caregivers had a good understanding of how to navigate the health care system. The results point to needs for supports for health system navigation, improved inter-professional collaboration, more effective health information systems, and greater patient and family engagement. We are currently developing and testing interventions to more effectively 'manage the seams' in the health care system.

Co-Author(s): **Jacobi Elliott**, University of Waterloo; **Bert Chesworth**, University of Western Ontario; **Joanie Sims-Gould**, University of British Columbia; **Dorothy Forbes**, University of Alberta

Primary Care

Simcoe (Lobby Level)

Gestion des soins de première ligne

Simcoe (Réception de l'hôtel)

F5.1 Primary Healthcare Renewal: No measurable short term gain

Presented by **ALAN KATZ**, Professor, University of Manitoba

To evaluate the impact of a primary healthcare renewal initiative (Physician Integrated Network -PIN) on the clinical practice of participating physicians To compare changes in patterns of practice between indicators where financial rewards (pay for performance (P4P)) support change and those that were not included in the reward system We used the Population Health Research Data Repository housed at the Manitoba Centre for Health Policy in a longitudinal matched cohort study to compare the clinical practices of 177 physicians over 22 indicators addressing prevention and screening, disease management and health care delivery, with derived matched practices consisting of patients who received their care from non-participating physicians. Each physician's practice patients were matched with up to 10 patients matched on age, sex, and geography to create the matched cohort. We compared the practice patterns to the matched cohorts 2 years prior and 2 years after the implementation of PIN. Clinics were enrolled in PIN in 2 phases that were analyzed separately. Phase 1 clinics were enrolled in 2006 while Phase 2 clinics were enrolled in 2008. When compared to their matched cohort the 82 physicians in the Phase 1 clinics scored better for 5 indicators (7 for Phase 2 clinics) and worse for 8 indicators (2 for Phase 2) pre PIN. Post PIN, Phase 1 clinics scored better for 12 indicators (9 for Phase 2) and worse for 4 indicators (3 for Phase 2). Phase 1 clinics had a significant increase in 8 indicators and a decrease in 1 indicator over time. Phase 2 clinics had a significant increase in 4 indicators and a decrease in 5 indicators. There is no relationship between changes in rates and relationship to P4P. This study adds to the body of evidence on the impact of P4P on clinical practice patterns in primary care. While the impact of PIN extends beyond P4P and the indicators we were able to measure, we were unable to demonstrate a positive impact of PIN on physician practice patterns.

Co-Author(s): **Dan Chateua**, University of Manitoba; **Kari McGowan**, Manitoba Centre for Health Policy; **Carole Taylor**, Manitoba Centre for Health Policy; **Leanne Rajotte**, Manitoba Centre for Health Policy

F5.2 The Development of a Practice-level Primary Care Patient Experience Survey

Presented by **KAMYAB GHATAN**, Evaluation Coordinator, Health Quality Ontario; **GAIL DOBELL**, Director, Research Methods and Evaluation, Health Quality Ontario; **JONATHAN LAM**, Evaluation Manager, Health Quality Ontario

Understanding patient experience is key to providing good patient centred care. In Ontario, no standardized practice-level tool exists for primary care physicians and organizations to measure and monitor patient experience. To fill this gap, a practice-level Primary Care Patient Experience Survey was developed. An environmental scan of existing local and international tools, and one-on-one key informant interviews (n=8) informed the survey framework and survey questions. Based on environmental scan and interviews, a test survey was developed and completed by 800 Ontarians who have seen a physician in the past year to examine its statistical/psychometric properties using regression, factor and reliability analyses. The draft survey was finalized based on the quantitative results as well as qualitative feedback from an Advisory Panel, which included representatives from primary care provider associations, decision makers, researchers and patient associations. The selected survey framework follows the patient journey through his/her primary care physician's clinic from point of initial contact to departure, and his/her overall experience. Regression analyses showed that the questions on the test survey were effective in explaining overall primary care experience (R²=0.80) and an index score, calculated from five key experience questions (e.g. overall experience with your regular doctor), was a highly reliable measure of overall experience (Cronbach's alpha = 0.93). Furthermore, factor analysis confirmed that the questions were measuring the same construct as all items loaded onto one component. Based on the statistical analyses and qualitative feedback from key stakeholders, the final survey consists of 30 questions about the patient's primary care journey and 13 questions on the patient's demographic information. Following a pilot test with practices representing a range of Ontario primary care models, the practice-level survey will be made broadly available for physicians/organizations to measure their patients' experience, and identify quality improvement opportunities. This represents a major milestone in capturing patient experience and advancing patient centred care in Ontario.

Co-Author(s): **Gail Dobell**, Health Quality Ontario; **Jonathan Lam**, Health Quality Ontario

F5.3 Describing the predictive factors of effects of an interdisciplinary intervention for people with chronic conditions in primary healthcare

Presented by **MAXIME SASSEVILLE**, RN, MSc, Université de Sherbrooke

The aim of this research was to describe the predictors (related to the patients and characteristics of the intervention) of the effects of an interprofessional chronic disease prevention and management (CDPM) intervention among adult patients in primary healthcare (PHC) settings. This work is based on the secondary analysis of data from the PR1MaC project, a pragmatic randomized controlled trial looking at the impact of an intervention involving the integration of CDPM services in PHC. The main outcomes were substantive improvements in the eight domains of the Health education impact questionnaire (Heiq) measured at baseline and three months. Improvement in each domain of the Heiq constitutes our dichotomic dependant variables. The independent variables that will be included in the multivariate analysis are age, sex, education, marital status, number of chronic diseases, intervention length, number of professionals involved and number of objectives. A sample of 160 patients (84 males) constituted the intervention arm (mean age 52.66 ± 11.5 years). Multivariate logistic regression has shown that being a woman leads to better improvement in emotional wellbeing and social integration and support domains; increasing age leads to less improvement in emotional wellbeing domain; being married leads to better improvements in the self monitoring domain; having a completed a high school degree and an higher number of professionals involved in the intervention leads to better improvement in the skill and technique acquisition domain and an higher intervention length leads to better improvement in the positive and active engagement in life domain. No predictive factors were identified for the health directed behaviour and health services navigation domains. CDPM services for patients in primary healthcare represent an innovation for the future of care delivery. This project shed light on the factors associated with the successes and failures of those interventions. This information can contribute to healthcare providers' support and organization of services for these patients.

Co-Author(s): **Maud-Christine Chouinard**, Université du Québec à Chicoutimi; **Martin Fortin**, Université de Sherbrooke

F5.4 Structures and Processes of Teams Involving Nurse Practitioners and Family Physicians in Primary Health Care in Nova Scotia

Presented by **RUTH MARTIN-MISENER**, Associate Professor, Dalhousie University

In Nova Scotia, team-based primary health care (PHC) models are designed collaboratively by practice settings and health authorities to respond to local contexts. Our objective was to explore structures and processes of PHC practice teams involving family physicians (FPs) and nurse practitioners (NPs). Using a sequential mixed methods design, we conducted a survey of Nova Scotian PHC practice teams containing at least one NP and FP (n=51). The response rate was 61%. Data were analyzed using descriptive statistics. Survey results guided selection of four diverse practices for case studies, which included data from individual and focus group interviews and document review. Thematic analysis was used to analyze participant interviews (n%) that included patients (n=30), community leaders (n=17), FPs (n=9), medical specialists (n=1), NPs (n=5), receptionist/office managers (n=6), registered nurses (n=10), other health care professionals (n=7) and managers/administrators (n=4). Half the teams were NP-FP multidisciplinary (48.39%) and a third were NP-FP dyads (35.48%). About half were located in areas with populations of less than 10,000 (54.8%). Although teams were primarily co-located, more dyads (27%) than multidisciplinary teams (13%) were not co-located. Whereas all multidisciplinary teams indicated they provided services for a shared population, 18% of dyads did not. Most teams had electronic medical records (EMRs) (70%), and had FPs remunerated by a method other than fee-for-service (77.4%). Collaboration was supported by having a shared vision for the practice in most teams (71.0%). Data from case studies supported the importance of teams having a shared vision. Having a shared EMR enabled some teams to offer services to geographically dispersed patients of the practice. The structures and processes within PHC teams involving NPs and FPs in Nova Scotia are diverse. Most teams are located in small rural communities. Having a shared vision for the practice enables teams to work together to provide optimal patient care in their context.

Co-Author(s): **Fred Burge**, Dalhousie University; **Judy Chisholm**, Nova Scotia Dept. of Health and Wellness; **Faith Donald**, Ryerson University; **Andrea Murphy**, Dalhousie University

Health Quality & Safety 2

Osgoode (3rd Floor)

Qualité et sécurité des soins de santé 2

Osgoode (3^e étage)

F6.1 Choice of Bearing Surface for Total Hip Replacement Affects Need for Repeat Surgery: a Canadian Perspective

Presented by **NICOLE DE GUIA**, Manager, Joint Replacement and Multiple Sclerosis Registries, Canadian Institute for Health Information

Revision surgery, which involves replacing implants from total hip replacements (THR), can be costly for the health care system and poses risks for patients. We used data from the Canadian Joint Replacement Registry (CJRR) and the Discharge Abstract Database (DAD) to investigate the risk of revision surgery of THR with different bearing surfaces including metal-on-metal combinations. We used 8 years of linked CJRR and DAD records for a cohort of 56,942 patients from data submitted from all provinces and territories, excluding Quebec and PEI. We calculated 5-year cumulative revision estimates using Kaplan-Meier curves, and we used Cox Proportional Hazards Modeling to estimate hazard ratios of mid-term revision (within 5 years of primary procedure). Factors included in the analyses included patient age and sex, bearing surface, procedure year, geographic region and the presence of comorbidities at the time of primary procedure. Based on the study cohort, there was variation in the types of bearing surface combinations, which is influenced by orthopaedic surgeon choice. Metal-on-polyethylene was the most common type of bearing surface (72.9% of THR), followed by metal-on-metal (9.0% of THR). Other lesser common bearing surface combinations were ceramic-on-ceramic (8.5%) and ceramic-on-polyethylene (4.6%). Although metal-on-metal THR was less common, the likelihood of a revision within 5 years for patients receiving a large diameter metal-on-metal THR was 5.9%, which was nearly double the risk of metal-on-cross-linked-polyethylene at 2.7%. Other significant risk factors affecting the need for a mid-term revision were patient's age, presence of comorbidities at the time of primary procedure and geographic region. Our findings were consistent with those from other international joint registries that showed higher revision rates for a subset of metal-on-metal hip implants. Consideration of implant and other factors influencing the need for revision surgery is important for health system managers and clinicians in working towards improved outcomes for joint replacement patients as well as increased health care system efficiency.

Co-Author(s): **Michael Terner**, Canadian Institute for Health Information; **Shirley Chen**, Canadian Institute for Health Information; **Vivian Poon**, Canadian Institute for Health Information; **Eric Bohm**, Concordia Joint Replacement Group, University of Manitoba

F6.2 The value of personalizing medicine: Medical oncologists' views on gene expression profiling in breast cancer treatment

Presented by **YVONNE BOMBARD**, Scientist & Assistant Professor, Li Ka Shing Knowledge Institute of St. Michael's Hospital & University of Toronto

Guidelines recommend gene-expression profiling (GEP) tests to identify early-stage breast cancer patients who may not benefit from chemotherapy, potentially reducing toxicity and healthcare costs. Several GEP tests are clinically-validated yet limited evidence exists about their impact on chemotherapy decisions (clinical utility). We explored medical oncologists' perspectives on GEP's clinical utility. We used a qualitative study design, comprising individual telephone interviews with medical oncologists (n=14; 10 academic, 4 in the community) from Ontario, Canada. Academic medical oncologists were recruited through participating academic oncology clinics, professional advertisements and referrals from the research team. Medical oncologists practicing in community hospitals were recruited through e-mail invitations and referrals from the research team. Interviews were digitally audio-recorded, transcribed and coded for both anticipated and emergent themes pertaining to participants' use of and reservations about the test and its perceived clinical utility. Qualitative data were analysed using interpretative methods, including content analysis and constant comparison techniques. Oncologists' opinions were mixed about GEP's utility for early-stage breast cancer chemotherapy decisions. Some considered it as a tool that provided additional comfort or confidence to their established approach to risk assessments, while others described it as 'critical' and used it to resolve their uncertainty about recommending chemotherapy. Some community oncologists also valued the test as confirmation of what they felt were inconsistent pathology reports. On balance, oncologists believed GEP tests led to 'more appropriate chemo use'. However, some raised concerns about its reliability, proprietary nature, high cost, inappropriate/over-use and variability in interpretation of results within their medical community. Paradoxically, oncologists felt it was simple to explain the test to patients but remained uncertain about patients' understanding of the results and their implications for treatment. Oncologists valued the test as an additional decision support tool, despite their concerns about its reliability, cost, inappropriate use by other oncologists and patients' limited understanding. Results identify a need for patient decision aids and clinical practice guidelines to support patients' understanding and standardized use and interpretation of the test.

Co-Author(s): **Linda Rozmovits**, Independent Qualitative Researcher; **Maureen Trudeau**, Sunnybrook Health Sciences Centre; **Natasha Leighl**, Division of Medical Oncology, Princess Margaret Cancer Centre; **Ken Deal**, McMaster University; **Deborah Marshall**, University of Calgary

F6.3 How Long Do People With Osteoarthritis Self-Manage Before Seeking Physician Care? Findings From The Survey On Living With Chronic Diseases In Canada

Presented by **KAREN MACDONALD**, Research Associate, University of Calgary

Self-management prior to seeking physician care is a key period when people with early osteoarthritis (OA) can make lifestyle choices to reduce pain, improve function and slow disease progression. Our objective was to estimate self-management duration and health care utilization for people with hip- and knee-related OA. Respondents were a nationally-representative sample of 4565 Canadians aged ≥20 years from the arthritis component of the 2009 Statistics Canada Survey on Living with Chronic Diseases in Canada, who reported on their experience living with arthritis. We report the percentage of OA and hip-, knee-, or hip and knee-related OA. We estimate mean age of symptom onset and diagnosis, self-reported medication use, contacts with health professionals and self-management strategies over the past 12 months. Estimates were weighted to represent the Canadian household population living with arthritis. Overall, 1755 (37%) respondents reported having OA (any joint) and no other arthritis diagnosis. Of these, 70% experienced pain in the hip(s), knee(s), or hip(s) and knee(s). Nearly half (48%) of individuals with OA first experienced pain in their hip or knee in the same year as their OA diagnosis, 42% experienced pain at least one year prior to diagnosis, and 10.2% of individuals experienced pain following an initial diagnosis of OA. Among those who experienced pain prior to an OA diagnosis, the average duration spent self-managing was 7.7 years. In the past year, most respondents used non-prescription medications to manage symptoms (66%), fewer than 25% saw a pharmacist or physiotherapist, and 12% attended an educational class. Individuals with OA spend a considerable time period self-managing their disease. This presents an opportunity to make lifestyle changes which could reduce pain, improve function and reduce healthcare resource use. This study fills a gap in our understanding of self-management of OA which cannot be informed by administrative data.

Co-Author(s): **Claudia Sanmartin**, Statistics Canada; **Kellie Langlois**, Statistics Canada; **Deborah Marshall**, University of Calgary

F6.4 Program Planning for Weight Management in Primary Care

Presented by **PAULA BRAUER**, Associate Professor, University of Guelph

Recognizing that obesity prevention and treatment is complex, this initiative aimed to develop a flexible population-based planning framework for services planning in primary care. The framework was developed based on input from patients, interprofessional providers and the evidence for obesity management in primary care. Focus groups were conducted with providers and patients to identify opportunities for improved obesity management. Transcripts were thematically analyzed for ideas on new services, which were used to develop a draft planning framework. The planning framework was further developed by 19 Family Health Teams in Ontario using a moderated consensus process and electronic meeting software. A national panel reviewed the final draft. Finally, evidence was incorporated into the planning framework based on a scoping literature review (2003-2012) completed to identify evidence of improved obesity management in primary care. Key program activities emerged from the focus groups directed at patients and providers. For program planning purposes, providers identified 5 target groups: pregnancy to 2 yrs, 3-12 yrs, 13-18 yrs, 18+ yrs at health risk, and 18+ with complex care needs. Desired outcomes were identified and activities were prioritized under categories: raising awareness (e.g. providing information and resources on weight-health), identification and initial management (e.g. wellness care), follow-up management (e.g. group programs), expanded services (e.g. availability of team services), and practice initiatives (e.g. interprofessional education). The most promising strategies from the scoping review included: screening, provider education and practice facilitation. Providers emphasized screening and management as part of a wellness visit, and group education. Evidence supported only some approaches that were important to providers. This novel planning tool clarifies key goals at different stages in the life course and by health condition, and indicates where evidence and provider perspectives converge and differ in developing programs to manage obesity. To date, the framework has facilitated priority setting in teams planning new services and implementation studies.

Co-Author(s): **Dawna Royall**, University of Guelph; **John Dwyer**, University of Guelph; **A. Michelle Edwards**, University of Guelph; **Tracy Hussey**, Hamilton Family Health Team

Knowledge Translation & Exchange

Johnston (Convention Level)

Application et échange des connaissances

Johnston (Niveau « Convention »)

F7.1 Developing and Refining the Methods for a One-Stop Shop for Research Evidence about Health Systems

Presented by **JOHN LAVIS**, Professor and Director, McMaster Health Forum, McMaster University

Policymakers have not been able to: find research evidence about health systems using intuitive terms; know when they have conducted a comprehensive search; or rapidly identify decision-relevant information from searches. To address these gaps, we developed an approach to building a one-stop shop for research evidence about health systems. We developed a taxonomy of health system topics and iteratively refined it by drawing on existing categorization schemes and applying it to progressively larger bundles of research evidence. We identified systematic reviews, systematic review protocols and review-derived products through searches of Medline, hand searches of several databases and journals, and continuous scanning of listservs and websites. We developed an approach to providing 'added value' to existing content (e.g., identifying the countries in which included studies were conducted) and to expanding the types of evidence eligible for inclusion (e.g., economic evaluations). The taxonomy is organized by governance, financial and delivery arrangements and by implementation strategies. The one-stop shop, called Health Systems Evidence, contains: a comprehensive inventory of evidence briefs, overviews of systematic reviews, systematic reviews, systematic review protocols, registered systematic review titles, economic evaluations, health reform descriptions and health system descriptions; and many types of added-value coding. It is continuously updated and new content is regularly translated into Arabic, Chinese, English, French, Portuguese, Russian and Spanish. Policymakers and stakeholders can now easily access and use many types of research evidence about health systems to inform decision-making and advocacy. Researchers and funding agencies can also readily identify gaps in the current stock of research evidence and domains that could benefit from additional research and synthesis.

Co-Author(s): **Michael Wilson**, McMaster University; **Amanda Hammill**, McMaster Health Forum; **Kaelan Moat**, McMaster Health Forum; **Jennifer Boyko**, Western University

F72 A framework for supporting the use of informal knowledge in public health policymaking

Presented by **JENNIFER BOYKO**, Postdoctoral Fellow, University of Western Ontario

Public health policymakers use many types of formal and informal sources of knowledge to inform their decisions. However, it is not clear what types of knowledge to use in the absence of or along with formalized knowledge such as peer reviewed research. Our research sought to answer the questions: What types of knowledge and evidence do public health policymakers use? What is the relative strength of different types of evidence when used in different contexts? We carried out a scoping review to understand more about the types of knowledge and evidence that public health policymakers use. Our search strategy included: 1) a database search of peer reviewed and grey literature; 2) hand searching commonly cited journals; and, 3) an internet search informed by our knowledge of relevant organizations, conferences and networks. Titles and abstracts were screened initially, and then we applied inclusion/exclusion criteria to select relevant literature. We used nVivo 10 to extract and code data from the final set of documents. Our team met on several occasions to come to agreement on the nature of the coding, develop definitions for each code, and then chart and organize the final set of codes into a framework. Our search identified approximately 65 relevant articles that included both peer-reviewed and grey literature. Our framework describes: a) the types of formal and informal knowledge that can be used by public health policymakers; b) key factors that should be considered when using different types of knowledge in different policy contexts; and, c) preliminary assessment criteria for judging the quality of formal knowledge considered to be 'grey' literature. Timing, transparency, accountability and community engagement are key factors within the decision-making context. Our research has the potential to strengthen evidence-informed decision-making processes in the public health sector. The framework we developed provides guidance for public health policymakers in using various types of knowledge and evidence in order to ensure policy decisions are meaningful and contextually relevant to the policy issue at hand.

Co-Author(s): **Kothari Anita**, Western

F73 Translating Research into Care (TRIC): Improving Health Care Through Innovative Research Collaborations Between Scientists and Administrators

Presented by **SANDRA CROWELL**, Program Leader, Research Development, Capital Health and IWK Health Centre

Clinicians and administrators on the front lines of health care have great ideas about how to improve the health system, but to make these improvements, they must explore problems and potential solutions together. A unique new funding program called Transforming Research into Care (TRIC) Healthcare Improvement Research Program will be explained in detail. TRIC grants support research projects that will provide scientific evidence for improvements in care that have a high likelihood of being implemented in two Halifax Nova Scotia hospitals - QEII Health Sciences Centre and the IWK Health Centre. Teams must be co-led by scientists and health care administrators and applications are assessed on their scientific merit and administrative feasibility. Three levels of funding are available - level 1 (planning grants) of up to \$3,000; level 2 - up to \$30,000; Level 3 up to \$100,000. Eighteen workshops were offered to explain the intent of, and support the development of, applications to the new funding program. Thirty seven applications were received in the first competition. Thirty four were peer reviewed by a panel composed of scientists, administrators, and industry and hospital foundation representatives. Fifteen were recommended for funding including 10 level 1; one level 2 and four level 3 awards. Funding for the research was provided, in part, from the two health centre foundations. Administrative costs associated with the research project were absorbed by the health system. Both qualitative and quantitative research was supported. Research topics and patient populations varied widely and examples of successful applications will be profiled in the presentation. The TRIC program was highly regarded by research scientists, clinicians, health care administrators and senior health system managers. Combining researcher's investigative abilities with administrator's practical know-how and authority to make changes has potential to result in higher quality/safer health care, improved patient satisfaction, better health outcomes, reduced wait times and cost to the system, patients and families.

Co-Author(s): **Patrick McGrath**, Capital Health and IWK Health Centre; **Lisa Underwood**, Capital District Health Authority; **Marjorie Sullivan**, IWK Health Centre

F74 A scoping review of appropriateness of care research in Canada from a health system perspective

Presented by **GALINA GHEIHMAN**, Student, University of Toronto; **YVONNE TSE**, Student, McMaster University

There is great interest in the appropriate use of health services to curb rising health care costs and improve system performance. We undertook a scoping review to (i) map out system-level appropriateness of care research and related activity across Canada and (ii) create a database to inform future work. We defined system-level appropriateness of care as that relating to the use or non-use of a health service or intervention based on: evidence of effectiveness, economic impact, or variations in use, with consideration of ethical implications and societal values. We searched Medline, EMBASE, and CINAHL databases between 2003-2013 using terms including 'appropriate', 'inappropriate', 'health technology assessment', and 'cost-effectiveness'. A screen of titles/abstracts was followed by full text review. Articles were included if they were Canadian-based and relevant to our definition. The database search was complemented by a website search of relevant Canadian organizations to uncover appropriateness publications, programs, or initiatives. A total of 4979 articles were identified through the literature search after duplicate removal. 604 abstracts were included for full-text review and 104 articles relevant to system-level appropriateness of care across Canada were charted. Charted studies included systematic reviews, randomized controlled trials, cost-effectiveness analyses, and health technology assessments, among others. Of the 104 studies charted, 65 contained an evaluation of appropriateness, 30 used a method of cost-effectiveness or total cost impact analysis, and 9 involved another methodology. Appropriateness was most often determined by comparison of practice to guidelines (n=26 articles). The most common health service categories included drug therapy (n=41) and health service utilization (n=33). Eleven clinical areas were identified (as well as a twelfth 'other' category), with cardiovascular care being the most common (n=21). This review addresses an area of significant interest for health systems across Canada and a key priority of the Council of the Federation. The resulting database maps out Canadian research activity from a health system perspective and is a useful resource to support evidence-based decision-making and guide future appropriateness research.

Co-Author(s): **Yvonne Tse**, McMaster University; **Susan Brien**, Health Council of Canada; **Mary Byrnes**, Health Council of Canada; **Mark Dobrow**, Health Council of Canada

Rapid Fire Poster Presentations

**Présentations d'affiches
en un coup d'œil**

Community Care

Toronto Ballroom (Convention Level)

Soins communautaires

Toronto Ballroom (Niveau « Convention »)

RF1.1 The Journey towards Benchmarking in Long-Term Care (LTC) Public Reporting

Presented by **BERNADEE KOH-BILODEAU**, Project Lead, Performance Monitoring and Reporting, Health Quality Ontario

This poster will illustrate describe how our organization developed and launched benchmarks for indicators it publicly reports in the long-term care (LTC) sector. We discuss how the benchmark selection framework was developed with an LTC expert advisory group and engaged stakeholders before, during and after the launch. Working with the Ontario Ministry of Health and Long-Term Care and other key partners, benchmarking was identified as a tool to support quality improvement. In order to support quality improvement, the established benchmarks should be evidence-based, agreeable to major stakeholders, catalysts for quality improvement and indicative of high quality care. To this end, a modified Delphi process with an expert panel, composed of LTC home operators, clinicians and researchers, was employed to establish the benchmarks. This process involved a literature review of existing benchmarks, analysis of Ontario and Canadian data and two surveys completed by the expert panel. Distributions of indicator results in Ontario and other Canadian regions were used to provide context for selecting values that are recognized as aspirational but also felt to be achievable. Benchmarks for nine risk-adjusted indicators were selected. In many instances, the 90th percentile performance was used as a starting point in discussions about what the benchmark should be. In April 2013, webinars were held with the sector presenting the aspirational benchmarks. The webinars emphasized integration of these stretch targets in quality improvement plans. Resources were also provided to aid homes to utilize data to set their own targets. In November 2013, these benchmark values were reported alongside indicator results at the individual LTC home level. The collaborative process and evidence were key in this journey to develop benchmarks and publicly report this alongside data for LTC homes. Taken together, benchmarks, quality improvement resources and public reporting represent some levers that can support LTC homes in improving quality of care.

Co-Author(s): **Irfan Dhalla**, Health Quality Ontario; **Gail Dobell**, Health Quality Ontario; **Wissam Haj-Ali**, Health Quality Ontario; **Jonathan Lam**, Health Quality Ontario

RF1.2 Patterns of Care for Children who are Persistently High Resource Utilizers: Implications for Policy

Presented by **ASTRID GUTTMANN**, Senior Scientist, ICES

To describe the characteristics, costs, and patterns of health care use among pediatric (high resource utilizer) HRU patients and analyze the clinical and socio-demographic predictors of persistently high utilization in a population-based sample in a universal health insurance system. Complete health system use and costs were analyzed for all non-newborns (< 18 yo) in Ontario, Canada (population 14 million) from 2007-2012 using linked health administrative databases. HRUs were defined as the top 1% of the population in terms of total cost in 2007. Persistence was defined as ongoing top 1% in the subsequent four years. We used logistic regression to test the association of clinical and socio-demographic characteristics with persistence. 28,642 children were in the top 1% in 2007 (median [IQR] cost Canadian \$22,945 [\$13,419, \$49,316]). In the four subsequent years, 138 (0.5%) died, and 2,472 (10.5%) persisted in the top 1% of costs. The highest rates of persistence were among those with neurological impairment (38%) and multiple complex chronic conditions (16%) as compared with more acute, self-limiting problems such as trauma and severe infections (both <1% persistence). In multivariable analyses, those with technology assistance were four times more likely (aOR 3.86, 95% CI 3.46 - 4.29) to be persistent HRUs. Socioeconomic status was not associated with persistence. Among the persistent HRUs, home care use was the largest contributor to cost (58.3% of total) followed by inpatient use (15.4%). 37% did not have any inpatient use in the follow-up period although 82% had an Emergency Department visit. Pediatric HRU populations characterized by technology assistance, neurologic impairment and complex chronic conditions are most likely to have continued high healthcare costs although the majority do not have persistently high costs year over year. Policy focused on bending the cost curve by targeting pediatric HRU inpatient use may not result in substantial savings.

Co-Author(s): **Eyal Cohen**, Hospital for Sick Children; **Matthew Kumar**, ICES; **Qendresa Hasanaj**, ICES

RF1.3 Making Research Results Relevant and Useable: Presenting Complex Data to Non-Research Stakeholders in the Nursing Home Setting

Presented by **JENNIFER KNOPP-SIHOTA**, Assistant Professor, Athabasca University

The extent to which evidence is translated into action is often dependent on the success of communicating often complex data not only to those who manage the system but also to those who deliver the care. We sought to describe the methods we used to present complex research data to non-researcher stakeholders. To illustrate an effective technique of presenting complex data, we used previously collected data within our program of research, Translating Research in Elder Care (TREC). In TREC, we focus on improving the quality and safety of care delivered to nursing home (NH) residents. We used k-means cluster analysis to separate NH facilities and care units into subgroups based on organizational context (work environment) in order to study context as it relates to bedside knowledge use and clinical outcomes. We then produced simple scatter plots to illustrate the subgroup differences. Focus groups were conducted to determine the usefulness of our data reporting method. Concepts related to organizational context (10 variables) clustered on two non-overlapping dimensions. We interpreted these clusters as 1) facilities or care units with higher levels of organizational context (favourable) or 2) facilities or care units with lower levels of organizational context (less favourable). Using scatterplots, we compared the subgroups based on urinary tract infections and indwelling catheters and found that NH facilities with low rates of both urinary tract infections and indwelling catheter use were higher in organizational context. We then compared the groups based on bedside research utilization and found that those with more favourable organizational context reported higher research utilization when delivering care to residents. We created customized reports utilizing these graphs allowing stakeholders to assess individual care unit / facility differences recognizing the significance of organizational context to positive clinical outcomes. Focus groups feedback was very positive, although we have not yet formally evaluated these procedures. Our method of presenting complex data appears to provide deeper insight into interrelationships between multiple variables for stakeholders who are not advanced users of statistics. Tailored messages are the most effective means of conveying research results to heterogeneous target audiences of research participants, administrators, or policy makers.

Co-Author(s): **Carole Estabrooks**, University of Alberta; **Christina Manraj**, University of Alberta; **Peter Norton**, University of Calgary

Primary Care

Toronto Ballroom (Convention Level)

Gestion des soins de première ligne

Toronto Ballroom (Niveau « Convention »)

RF2.1 Leaving Against Medical Advice: Characteristics Associated with Self-Discharge

Presented by **DEREK LEFEBVRE**, Senior Analyst, Canadian Institute for Health Information

Each year, approximately 1% of acute care and emergency department patients self-discharge against medical advice at the risk of adverse health outcomes. The study examines the prevalence of self-discharge in Canada; characterizes patients who self-discharge against medical advice; and quantifies its impact on the health care system and patient outcomes. All 2011-2012 adult inpatient acute care discharges (excluding Quebec) from the Canadian Institute for Health Information's Discharge Abstract Database and Ontario Mental Health Reporting System as well as emergency department discharges in Ontario and Alberta from the National Ambulatory Care Reporting System were used in this study. Self-discharges were defined as those who left against medical advice or did not return from leave. Compared with patients routinely discharged, self-discharged patients were typically younger males, lived in lower income neighbourhoods, were diagnosed with a mental health or substance use disorder and had a history of leaving against medical advice. Self-discharged patients were more than twice as likely to be readmitted to acute inpatient care within a month (24% versus 9%) and more than three times as likely to visit the ED within a week (35% versus 11%), compared with those routinely discharged. Leaving against medical advice has a significant impact on the health system and on patient outcomes. To decrease the number of these discharges and minimize the negative effects, strategies such as improving continuity of care and access to targeted community-based services, and taking a more patient-centred approach could be implemented.

Co-Author(s): **Josh Fagbemi**, Canadian Institute for Health Information; **Hong Ji**, Canadian Institute for Health Information; **Jessica Burnett**, Canadian Institute for Health Information; **Allie Chen**, Canadian Institute for Health Information

RF2.2 Establishing a performance measurement framework for primary care in Ontario

Presented by **BRIAN HUTCHISON**, Senior Advisor for Primary Care, Health Quality Ontario

A systematic approach to primary care performance measurement is needed to provide useful information on a regular basis to inform planning, management and quality improvement at the practice and system levels. Our organization, in collaboration with key stakeholders, is developing a Primary Care Performance Measurement (PCPM) framework. The Steering Committee, comprising senior representatives of 18 stakeholder organizations, identified system and practice level measurement priorities across 9 domains based on an environmental scan, a summit of primary care stakeholders and a stakeholder survey. The Steering Committee established Measures and Technical Working Groups that include data and policy experts and patient and provider representatives. For each priority measurement area, the Measures Working Group ranks a set of potential measures using a survey tool. Guided by the survey results and a set of relevance and validity considerations, the Measures Working Group selects specific measures. The Technical Working Group then identifies technical specifications, appropriate data sources and required infrastructure. The Steering Committee provides recommendations for the ongoing implementation and governance of the PCPM framework. Priority measurement areas were identified across each of the 9 domains (Access, Effectiveness, Safety, Patient-Centredness, Efficiency, Focused on Population Health, Equity, Appropriately Resourced, and Integration). The Measures and Technical Working Groups are now working to prioritize specific measures for each measurement priority. Access and Patient-Centredness domains was completed in December 2013. 16 system-level measures and 8 practice-level measures for Access and 19 system-level measures and 16 practice-level measures for Patient-Centredness were recommended. Review of the remaining domains will be completed by May 2014. As Equity crosscuts the other domains, the Working Groups have identified potential equity lenses and analytic strategies for equity assessment as well as risk adjustment factors and methodology to permit comparisons across settings and over time. The final set of specific measures and recommendations on infrastructure, analysis and reporting are planned to be released in summer of 2014. The PCPM framework, developed through broad stakeholder engagement, can be used to assess primary care performance and act as a key enabler for strengthening primary care.

Co-Author(s): **Wissam Haj-Ali**, Health Quality Ontario; **Saurabh Ingale**, Health Quality Ontario; **Naira Yeritsyan**, Health Quality Ontario; **Ryan Monte**, Health Quality Ontario; **Naushaba Degani**, Health Quality Ontario; **Gail Dobell**, Health Quality Ontario; **Irfan Dhalla**, Health Quality Ontario

RF2.3 Environmental Scan of Patient-Centred Innovations for Persons with Multimorbidity in Quebec and Ontario

Presented by **BRIDGET L. RYAN**, Post-doctoral Fellow, Western University

To identify Chronic Disease Prevention and Management (CDPM) initiatives in Quebec and Ontario; to create a compendium of initiatives; to assess their link to primary care (PC), their focus on multimorbidity, the degree of patient-centred relationships and coordination and to identify initiatives that have robust evaluations. The Health Planning Approach was used to perform the Environmental Scan (ES) with the assistance of the Team's named decision-makers from the two provinces (Agence de santé et de services sociaux (ASSS) in Quebec; Local Health Integration Network (LHIN) in Ontario). Federal and provincial databases were also searched for existing lists of CDPM initiatives. Interviews were conducted with the coordinators of identified initiatives. A general profile of the various CDPM initiatives was generated including: program presentation, targeted clientele, results and impacts of the program and its evaluation. The ES identified 62 programs linked to PC, 69% of them led by PC and 95% were patient-centred. The focus on multimorbidity is present in 56% of the programs. Only 47% of the programs have robust evaluations of the effects on patients and 45% have organisational evaluations. The following themes emerged from the ES: Revenue streams and delivery paths are complex and varied; Some programming in common but much is tailored to practice-level needs and expertise; Regional initiatives with recurrent funding are less evaluated than research innovations; Number of initiatives are single disease oriented; Increasing interest in engaging and collaborating with PC. The ES helped the Team to start building partnerships with the initiatives and identified programs interested in participating in the realist synthesis and possible program transformation. We observed an interest in multimorbidity and patient-centred delivery. The importance of evaluation was recognized but not conducted often.

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Health Human Resources, Policy and Politics
Toronto Ballroom (Convention Level)

Ressources humaines, politiques publiques et rapports de force politiques dans le secteur de la santé
Toronto Ballroom (Niveau « Convention »)

RF3.1 Tracing Patient Centred Care Publications Over the Last 67 Years

Presented by **PAULA ROWLAND**, Assistant Professor, University of Toronto

Increasingly, patient centered care (PCC) is considered an essential element of quality within health systems. The term itself remains ambiguous, taking on different meanings in different institutions and different times. Understanding how the concept is deployed helps us understand what constitutes PCC and how we might organize ourselves to achieve it. This study involved a publication analysis of literature available through MedLine and CINAHL databases from 1946 until 2013. 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. There is a substantial and ongoing increase in publications mapped to the subject heading 'patient centered care', starting in the early 2000s. The most striking increase in publications is within the fields of health administration and health service research. These results are examined in light of sociological theories related to social movements in health. In our analysis, we define social movements as collectivities acting with some degree of organization and continuity for the purposes of challenging or defending authority, whether that authority is institutionally or culturally based. This theoretical lens gives a way to consider 'patient centered care' as a new kind of social movement, intersecting in particular ways with policy makers, administrators, and clinicians. Thinking of PCC as a social movement allows us to consider questions of patient identity, to examine the movement's goals and strategies, and the relationship with healthcare institutions and the governing of healthcare itself. This study suggests that PCC is taking on new meanings, reflective of larger social movements at play.

Co-Author(s): **Paula Rowland**, University of Toronto; **Simon Kitto**, University of Toronto

RF3.2 Politics and policy-making in Canadian cancer drugs: The role of Avastin funding in Ontario in shaping the pan-Canadian Oncology Drug Review

Presented by **ANSON TANG**, Clinical Lecturer, University of Waterloo

The objective is to examine the background behind the 2009 Avastin (bevacizumab) funding issue in Ontario for treatment of metastatic colorectal cancer, how patients' access complaints were investigated by the Ontario Ombudsman, and its influence on the novel Ontario-based assessment process - the pan-Canadian Oncology Drug Review (pCODR). Kingdon's model of agenda setting was used to carry out an explanatory policy analysis of the key events and influences related to the establishment of the pan-Canadian Oncology Drug Review (pCODR) process in 2010. The role of institutions, interests and ideas and their relative prominence in each of the political, policy and problem streams of Kingdon's agenda setting model was examined through qualitative data analysis. Data sources consulted included relevant scientific literature, news media, Parliament of Canada committee minutes, and government, manufacturer and patient advocacy group websites. In 2007, a House of Commons committee clarified that the Common Drug Review (CDR) targets community-based medications (not intravenous), but does not have expertise to assess cancer drugs. The interim Joint Oncology Drug Review (iJODR) was established in 2007 which enabled manufacturers of cancer drugs (intravenous or oral) to make one submission through Ontario. Decisions resulting from these reviews would be considered nationally (except in Quebec) - but would not be binding. Further to these developments, a challenge to the capped funding of Avastin in Ontario emerged in 2009 as a focusing event, reinforcing the problems with differential access to cancer drugs across the country. An unlikely policy entrepreneur, the Ontario Ombudsman, opened a window for policy change through his scathing investigation, 'A Vast Injustice.' In 2010, pCODR succeeded iJODR. Ontario based, pCODR makes recommendations nationally (except Quebec), guiding cancer drug funding. pCODR follows the Accountability for Reasonableness framework, encompassing principles not always demonstrated by iJODR, e.g. transparency, representation (from patients). However, pCODR's recommendations are not binding. Thus, potential for inequitable national cancer coverage persists.

Co-Author(s): **Julia Abelson**, McMaster University

RF3.3 Employment Issues among Rural Family Physicians in Canada - 2013 National Physician Survey Results

Presented by **BILAL KOBEISSI**, Research Assistant, College of Family Physicians of Canada

1. To identify the key employment related issues for rural family physicians (FPs) in Canada using the 2013 National Physician Survey (NPS) data; 2. To compare the employment related issues between FPs in rural and urban settings of Canada using 2013 NPS data. The presentation will use data from the 2013 NPS survey for practicing family physicians. The NPS is an ongoing collaborative initiative led by the College of Family Physicians of Canada (CFPC), the Canadian Medical Association (CMA) and the Royal College of Physicians and Surgeons of Canada (Royal College). The online survey was sent to all practising physicians in Canada; all physicians had the opportunity to complete the survey, with voluntary participation. The 2013 NPS had a focus on recent physician employment issues and challenges. Rural FPs were found to be less satisfied with their employment compared to urban FPs (58.6% vs. 61.2%). They felt overworked (38.0% vs. 35.5%), working a mean of 57 hours/week, 6 hours more than urban FPs. Rural FPs provided 156 hours of on-call service hours/month, 57 hours more than urban FPs. 71% of rural FPs were satisfied with their professional life and 47% were satisfied with their personal and professional life balance, both 4% less than urban FPs. One third of rural FPs are planning to reduce weekly work hours (33%) and on-call hours (34%) over the next 2 years. 16% of rural FPs indicated the plan to leave rural practice for urban practice or relocate within Canada in next 2 years. Rural FPs were found to be less satisfied in relation to their employment compared to urban FPs. Key differences between the groups were found to be number of work hours, on call service, and professional satisfaction.

Co-Author(s): **Bilal Grava-Gubins**, College of Family Physicians of Canada; **Dragan Klijujic**, College of Family Physicians of Canada; **Inese Grava-Gubins**, College of Family Physicians of Canada

Healthcare Quality, Safety, Equity and Inequities
Toronto Ballroom (Convention Level)

Qualité, sécurité, équité et inégalités en matière
de soins de santé
Toronto Ballroom (Niveau « Convention »)

RF4.1 Exploring Gender Bias in Heart Failure Patients Treated in Specialized Multi-Disciplinary Ambulatory Clinics of Ontario

Presented by **LUSINE ABRAHAMIAN**, Clinical Epidemiologist, Toronto Health Economics and Technology Assessment (THETA) Collaborative, University of Toronto

To explore gender differences in patient profiles, diagnostic testing, medication prescription and referral patterns in specialized multi-disciplinary ambulatory heart failure clinics of Ontario. Detailed medical chart abstraction was conducted in randomly selected 9 HF clinics in Ontario, enrolling approximately 100 patients randomly selected from each clinic. Data was abstracted on patient demographics, co-morbidities, diagnostic tests, medication use and referrals over a 1-year period from the first clinic visit. Descriptive statistics and adjusted regression analysis were used to assess gender differences. Of the 884 patients, 314 were women (35.5%). At the first clinic visit, women were older, had better systolic function and lower prevalence of hyperlipidemia, diabetes, smoking and past revascularization. There were more women with non-ischemic HF etiology than men (63.9% vs 43.3, $p < 0.001$). Adjusted analysis did not reveal differences in the average number of echocardiographic assessments by gender as well as in the prescription rates of beta blockers and angiotensin converting enzyme inhibitors/angiotensin receptor blockers, during the first year of enrollment. The rates of dietary counseling and cardiac rehabilitation referrals were low in both groups with no significant differences between them. More men than women are referred to HF clinics. Women tend to be older with better systolic function and fewer comorbid conditions at their first visit to HF clinic than men. No major differences were observed in HF practice patterns between genders. Future studies should investigate the reasons of low referral rates of women to HF ambulatory clinics, impact on outcomes and assess the need for development of gender specific treatment protocols.

Co-Author(s): **Harindra Wijesundera**, Division of Cardiology, Schulich Heart Centre, Sunnybrook Health Sciences Centre, Ontario, Canada; **Murray Krahn**, Toronto Health Economics and Technology Assessment (THETA) Collaborative, University of Toronto; **Valeria Rac**, Toronto Health Economics and Technology Assessment (THETA) Collaborative, University of Toronto

RF4.2 Adverse Drug Reaction-Related Hospitalizations Among Seniors, 2006 to 2011

Presented by **JEFF PROULX**, Program Lead, CIHI

Adverse drug reactions (ADRs) are defined by the WHO as adverse effects of a drug that was properly administered in the correct dose, for therapeutic or prophylactic use. This analysis examines the prevalence of ADR-related hospitalizations and the types of reactions most commonly associated with these hospitalizations among seniors. This analysis used data from the Discharge Abstract Database and Hospital Morbidity Database from all Canadian provinces. Hospitalizations due to ADRs were identified using ICD-10 diagnosis and external cause codes. Abstracts were selected if they contained: 1. A most responsible diagnosis code that was either drug-related or due to a drug, provided that the most responsible diagnosis was not indicated to have occurred post-admission; or 2. A pre-admission comorbidity that was either drug-related or due to a drug; or 3. An external cause code that was drug-related. In 2010-2011, 1 in 200 Canadian seniors were identified as having an ADR-related hospitalization (five times more than non-seniors). Anticoagulants were the drug class most commonly associated with ADR-related hospitalizations. The most common diagnosis associated with anticoagulants was bleeding. Other drugs commonly associated with ADR-related hospitalizations were antineoplastic drugs and opioids and related analgesics. The most common diagnosis associated with ADR-related hospitalizations due to antineoplastic drugs was neutropenia, while the most common diagnosis associated with opioid-related hospitalizations was constipation. Many of the commonly observed ADRs were well known reactions. Although it is not always possible to prevent ADRs from occurring, patient monitoring and education are important to ensure that ADRs can be identified quickly so that harm to the patient, and in turn the likelihood of hospitalization, is minimized.

Co-Author(s): **Jordan Hunt**, CIHI

RF4.3 Mental illness and target length of stay after elective joint replacement

Presented by **JENNIFER HENSEL**, Research Fellow, Department of Psychiatry, University Health Network; Department of Psychiatry, University of Toronto

To determine the rate of mental illness among cases electively admitted for hip and knee joint replacement procedures at a large tertiary care network and to examine mental illness as a predictor of failure to meet expected length of stay targets. A secondary data analysis of joint replacement cases in the Discharge Abstract Data obtained from the hospital for the fiscal years between 2006/2007 and 2012/2013. Primary and co-morbid diagnoses were coded according to ICD-10. A mental illness was defined as the presence of a psychotic, mood or anxiety disorder coded in the discharge co-morbidities. Length of stay was coded as within target or not based on the current Ministry of Health targets of 4.4 and 7 days. A binary logistic regression analysis examined the relationship between mental illness and missed target controlling for age, gender, diagnosis and number of other co-morbidities. There were 6953 cases of joint replacement in the selection period. 151 (2.2%) had a documented mental disorder. Cases with mental disorders were more often female and had a higher number of other co-morbidities (mean 4.3 vs 2.4, $t(155.7) = -8.4$, $p < 0.001$). Failure to meet both 4.4 and 7 day targets were significantly associated with older age, a diagnosis other than arthritis and a higher number of co-morbidities. Female gender was associated with missing the 4.4 day target only. Controlling for these other variables, having a mental disorder was not associated with failure to meet either target. Although mental health patients may fare worse in short-term recovery from elective joint replacement, it may be explained by a higher number of non-mental health co-morbidities rather than the mental illness itself. This is a small study but raises an important consideration for future work on referral patterns and acute care funding.

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Poster Presentations – Day 1

Présentations d'affiches – Jour 1

Poster Presentations

Tuesday, May 13, 2014 | 9:45am – 11:00am

Governor General Suite (2nd Floor)

Présentations d'affiches

Le mardi 13 mai 2014 | 9 h 45 – 11 h 00

Governor General Suite (2^e étage)

46 A Comparative Analysis of Long-Term Care Policies and Placements

SHANNON REYNOLDS, Alumni, University of Toronto

The objective of this study was to determine whether provincial health care policies influence the supply of long-term care services in a province, and the care that is received by residents that require it. This was achieved by conducting a comprehensive review and analysis of the long-term care policies of Alberta and Ontario using a comparative case study method. Part Two then compared health conditions of nursing home, designated assisted living/retirement home residents in both provinces using information collected from the Resident Assessment Instrument - Minimum Data Set (RAI-MDS), the RAI - Long-Term Care Facilities (RAI-LTCF), the RAI- Home Care (RAI-HC), and the RAI - Assisted Living (RAI-AL). The hypothesis was that provinces with long-term care policies favouring institutional care over community care would have a higher proportion of residents with lower care requirements in institutional settings. Part One found that Alberta has had strong, consistent long-term care policies since 1998, focused on keeping residents out of nursing homes. In contrast, Ontario policies do not have strong direction or focus, though they recognize the importance of keeping seniors in the community. Comparisons of resident characteristics showed that while the Alberta nursing home population had the highest-need health conditions, Ontario nursing home residents had similar level of care needs. Moreover, the Alberta Designated Assisted Living population is not similar to the Ontario nursing home population. Still, the hypothesis is supported by the results, as the differences in nursing home populations between the two provinces indicate that long-term care policies are impacting where residents will receive care. This study suggests that healthcare policies impact the specific care settings where residents reside, indicating that targeting is successful from a policy standpoint. Using RAI assessments, policymakers have the opportunity to allocate funding based on the tangible needs of the population, and to compare with other jurisdictions for improvement.

Co-Author(s): Walter Wodchis, University of Toronto; Susan Bronskill, ICES; Colleen Maxwell, University of Waterloo

37 A Preliminary Model for Knowledge Management in Healthcare Organizations

ANITA KOTHARI, Western University

The knowledge needs of health executive is high, however knowledge assets are often lacking or difficult to acquire. This research explored knowledge management in healthcare organizations (HCOs) to both describe current trends in healthcare knowledge management and provide a draft model for successful use of knowledge management. A mixed methods approach was used to create a preliminary model of knowledge management in healthcare. Methods included: (1) qualitative interviews (n=24) with senior healthcare leadership that identified the types of knowledge important in these roles, as well as current information seeking behaviours/needs; (2) in-depth case study with senior leaders transitioning into new executive positions (n=2). The data were collected from 10 organizations, including but not limited to: hospitals, regional health authorities and government. Data were analyzed and a preliminary model for knowledge management in healthcare organizations was developed and assessed for face and content validity. Despite respondents' view that KM is necessary to system sustainability, the findings highlight the current paucity of formal knowledge management in our sample of Canadian HCOs. Knowledge assets were lacking or difficult to acquire as much of the available information was not in a usable format. We also describe the instrumental role of organizational culture, leadership and resources in supporting knowledge management. We present an initial model for knowledge management in healthcare includes a consideration of context (internal and external), knowledge acquisition and creation processes, knowledge use and synthesis, as well as appropriate knowledge deconstruction and archiving. Participants who reviewed the model agreed with its basic constructs and processes, were pleased with the result and saw the potential for incorporating knowledge management into organizational processes. KM was seen as necessary to system sustainability. Based on the investigation of existing knowledge management practices in a sample of diverse HCOs, our results articulate ways to improve knowledge management, increase organizational learning, and support evidence-informed decision-making. This research has implications for how to better integrate evidence and knowledge into organizations. Knowledge management can enhance and build the capacity of health professionals, allowing information processes to effectively inform organizational decision-making.

Co-Author(s): Nadine Wathen, Western University; Shannon Sibbald, Western University

27 A randomized trial of pharmacist prescribing for blood pressure management: the Alberta clinical trial in optimizing hypertension (RxACTION)

SHERILYN HOULE, Assistant Professor, University of Waterloo

One-third of Canadian adults with hypertension remain above target, and since hypertension is largely managed through lifestyle and drug therapy, pharmacists can help address its management. In Alberta, some pharmacists are also authorized to prescribe. This study aimed to determine the effectiveness of pharmacist prescribing for patients with uncontrolled hypertension. Patients with undiagnosed or uncontrolled hypertension were randomized to enhanced care or usual care, with those randomized to enhanced care further randomized to either fee-for-service or pay-for-performance remuneration for the pharmacist. Enhanced care patients saw the pharmacist for blood pressure (BP) management including prescribing where appropriate for 6 months. Usual care patients had their BP measured at 3 and 6 months, but the pharmacist did not actively intervene with their care. The primary outcome was difference in change in systolic BP between the enhanced and usual care groups, with change in systolic BP between remuneration groups as a secondary outcome. A total of 247 patients were enrolled in the study, with 180 randomized to enhanced care, and 67 to usual care. Within the enhanced care group, 91 patients were randomized to fee-for-service and 89 were randomized to pay-for-performance remuneration for the pharmacist. The required sample size of 340 patients was not achieved due to funding limitations. Systolic BP decreased by 17.9 mm Hg in the enhanced care group versus 11.0 mm Hg in usual care, resulting in a difference of 6.9 mm Hg (SE 2.3; p=0.003). Diastolic BP also differed between groups by 3.4 (SE 1.2) mm Hg, which was also significant (p=0.005). Due to inadequate sample size, the study was under-powered to detect a significant difference between remuneration groups. This study, the first randomized trial of pharmacist prescribing, found that pharmacist care can lower systolic BP by 6.9 mm Hg more than usual care. Even with contamination between groups suspected, this represents a statistically and clinically significant improvement. Additional research on remuneration for this service is required.

Co-Author(s): Ross Tsuyuki, University of Alberta; Theresa Charrois, Curtin University; Finlay McAlister, University of Alberta; Richard Lewanczuk, University of Alberta

26 A systematic review of cost-of-illness studies for juvenile idiopathic arthritis**MARY-ELLEN HOGAN**, PhD student, University of Toronto

Juvenile idiopathic arthritis (JIA) is the most common rheumatic disease in children, affecting 1 in 1000, and has substantial economic burden. Treatment is shifting to more costly drugs and no recent review is available that summarizes all costs for JIA. We aimed to summarize all cost-of-illness studies for JIA. MEDLINE and EMBASE were searched from inception to December 2013, using terms for cost-of-illness and arthritis. Review articles were also examined. Studies that were not published in English were excluded. Data extracted included the perspective taken, data sources, analysis, number of subjects, costs and year reported. Purchasing power parities from the Organization for Economic Co-operation and Development were used to convert costs into Canadian dollars and the healthcare component of the Consumer Price Index was used to convert costs to constant Canadian dollars (2012). Data are presented as cost per person per year. The search yielded 510 unique studies. Nine relevant studies were identified with data from 1340 patients with JIA. Studies were conducted in Europe (n=5), Canada (n=2), USA (n=1) and Turkey (n=1). Five studies surveyed patients' families to obtain data; 2 used medical records; 2 used both interview and medical records. Six studies reported mean direct medical costs; range: \$3,226 to \$20,435. Six studies reported mean patient/parent time costs; range: \$126 to \$5,219. Drug costs were \$5,275 to \$17,211 for those studies including newer biologic drug costs (n=2) versus \$379 to \$1,343 for those without (n=5); direct medical costs were \$5,811 to \$20,435 for those including biologic drug costs (n=3) versus \$3,226 to \$15,575 for those without (n=4). There was inconsistency in how costs were reported. The economic impact of JIA is considerable. The use of newer biologic drugs impacts cost-of-illness estimates and must be considered when interpreting and using this information. Current data largely reflects European and North American costs only. More research in this area will assist policy developers and decision makers.

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10 A three-dimensional approach to policy recommendation: obstetrical care in Ontario for low-risk births**NAUSHABA DEGANI**, Manager, Research Methods, Health Quality Ontario

To determine whether there was significant rate variation in the Ontario caesarean section (CS) rates, to examine the literature to assess factors affecting the likelihood of experiencing a caesarean delivery and to propose policy recommendations for the appropriate consideration of caesarean section in a low-risk obstetrical population. We employed a three-dimensional approach to evaluate and develop policy recommendations regarding the appropriate use of CS in a low-risk population. First, an evaluation on Ontario data for low-risk women was completed to determine if there was clinically important variation in CS rates. Second, an evidence-based review of factors affecting CS rates among low-risk women was undertaken and finally a critical review and contextualization of this evidence by a panel of Ontario experts including providers, administrators, policy makers and researchers. This was followed by extensive public and stakeholder engagement to implement and support the resulting policy recommendations. The review of Ontario CS rates showed that among low-risk women, CS rates varied significantly at the hospital level and could not be attributed solely to clinical differences. The evidence-based analysis identified 9 factors that significantly affected the likelihood of having a CS in a low-risk population, one of which was an induction policy that offered women induction no earlier than 41 weeks gestation. This was supported by Ontario data which found that CS rates were consistently twice as high among women whose labour was induced versus women who went into labour spontaneously. The critical review and contextualization of this evidence by the panel identified that an induction policy was an intervention that could be implemented in Ontario hospitals and monitored through existing provincial initiatives. We employed a three-dimensional approach to develop a policy recommendation to address CS rate variation in a low-risk population. The triangulation of methodologies resulted in robust, evidence-based recommendation that were appropriate to the clinical context in Ontario and that had strong support from the public, providers, administrators and policy makers.

Co-Author(s): Nancy Sikich, Health Quality Ontario

31 Adoption of New Innovations in Acute Care Hospitals**JENNIFER INNIS**, MA, NP, University of Toronto

How healthcare organizations learn and use new knowledge is particularly important in acute care hospitals, where organizational knowledge directly impacts the health of users. Using the example of health literate best practices, this presentation examines the factors that influence organizational learning capacity in acute care hospitals. In order to understand organizational learning capacity in acute care hospitals a literature review framed by two conceptual frameworks and a key concept was done. The Consolidated Framework for Implementation Research contains five general domains: the intervention, the inner setting, the outer setting, the individuals involved and the implementation process. Argote & Miron-Spektor's framework for analyzing organizational learning was used to understand how new knowledge is used in organizations. As well, the concept of organizational absorptive capacity fits within the domains of the CFIR and it is a key construct in the understanding of organizational learning. The literature review was used to develop a new conceptual framework that is focused on the factors influencing the learning capacity and uptake of best practices in acute care hospitals. This framework looks at the influence of the following factors on the absorptive capacity of the organization: the innovation or the best practice, incentives, external organizational response, organizational culture and structural characteristics. All of these factors affect and are affected by the absorptive capacity of the organization. It is this absorptive capacity that influences the organization's cycle of learning, which can lead to the uptake of the innovation. The adoption of new innovations such as health literate best practices has the potential to improve patient outcomes and decrease healthcare costs. The use of this new framework has the potential to facilitate improved hospital performance as well as improved use of acute care health resources.

Co-Author(s): Whitney Berta, University of Toronto

20 Best Practice Guidelines and evidence-based care: where are the Personal Support Workers (PSWs)?**JUSTINE GIOSA**, Research Associate, Saint Elizabeth

PSWs provide a considerable amount of home care services, yet their role is not well described or understood in current policy and practice, and even more lacking in current literature. The purpose of this study was to investigate the PSW role in evidence-based stroke rehabilitation and community reintegration in Ontario. A multi-phase mixed-methods exploratory study was conducted involving triangulation of data from chart audits of stroke survivors in home care (n234), surveys of PSWs to understand their experiences providing stroke care (n= 270) and key informant interviews with PSWs, their supervisors, physiotherapists, occupational therapists, speech language pathologists and Community Care Access Centre care coordinators to understand the challenges and opportunities to better integrating PSWs as key members of stroke care teams (n= 28). An interdisciplinary review of the 2010 Canadian Stroke Strategy Best Practice Recommendations (CSS-BPRs) to determine how PSWs can directly support evidence-based care was also conducted. Not only do the CSS-BPRs target frontline professionals only, a review of 146 references supporting the development of the CSS-BPRs found no direct evidence that the role and potential contribution of PSWs were specifically considered in any research. In some cases, the research purposely excluded PSWs from their scope, or appear only to have considered regulated health professionals. The data collected in this study indicates, however, that PSWs can support the provision of evidence-based stroke care beyond the traditional understanding of their role to provide assistance with simple activities of daily living to include working alongside other health care providers to make contributions to 13 areas of client care relevant to the CSS-BPRs (e.g., home safety and falls prevention) through observing, coaching assisting and reporting. The current development of evidence-based practice guidelines and health care policies based on traditional academic literature do not reflect the current reality of home care service provision. This study contributes to the development of a broader, more inclusive evidence-base that can be used to strengthen the current understanding and defined role of PSWs in home care.

Co-Author(s): Paul Holyoke, Saint Elizabeth

45 Can Recent Health Service Use Predict Postoperative Complications in Seniors Undergoing Colon Cancer Surgery?**ALIYA RAMJAUN**, Research Associate, Geriatrics Research Program, Mount Sinai Hospital

Colon cancer surgery is associated with high morbidity, particularly in seniors. There is currently a lack of tools for accurately identifying most vulnerable patients. The aim of this study was to identify predictors of severe postoperative complications in seniors undergoing colon cancer surgery based on recent health service use data. A historical prospective cohort of colon cancer patients aged \geq 65 years was assembled from hospitalization data provided by Quebec's provincial healthcare insurance provider (2000-2006). For each patient, health administrative claims were used to document domains of the Geriatric Comprehensive Assessment (CGA). 30-day post-operative severe complications were assessed using the Clavien-Dindo's classification (grades III-V). A multivariate Cox model was used to evaluate associations between complications and patient characteristics. 3,789 patients were included (median age: 76; female 54.3%). 24.2% of cases were emergency procedures. 29% of the cohort experienced a grade III, IV, or V complication, 17.3%, 12.6%, and 5%, respectively (median time to first complication: 6 days). The incidence of emergency room post-operative visits and re-admissions were 17.8% and 11.3%, respectively. In multivariate analysis, significantly associated variables with complications were: male gender (HR =3D 1.28, CI =3D 1.13-1.45), age \geq 85 years (HR =3D 1.25, CI =3D 1.03-1.52), \geq 10 active medications prescribed 6 months preceding surgery (HR =3D 1.24, CI =3D 1.03-1.49), recent care for renal insufficiency or cardiovascular disease (HR =3D 1.43, CI =3D 1.02-1.99; HR =3D 1.25, CI =3D 1.10 - 1.43), and emergency procedures (HR =3D 1.39, CI =3D 1.22-1.59). A large number of newly prescribed medications, recent care for renal insufficiency or cardiovascular disease, and emergency procedures were associated with severe postoperative complications. This study demonstrates the potential of developing assessment tools using recent health service use to identify vulnerable seniors at risk of post-operative complications.

Co-Author(s): Stanimira Krotneva, McGill University; Haytham Alabbas, McGill University; Tewodros Eguale, McGill University; Ari-Nareg Meguerditchian, McGill University

2 Child to Adult Transitions in Mental Health Care: Mind the Gap!**NEIL BARR**, PhD candidate, McMaster University

Too often vulnerable youth 'fall through the cracks' during the transition from child to adult mental health services. Here we distill overarching lessons from eight systematic reviews of the published literature to inform policy and practice of approaches to improve transitions from child to adult mental health services in Ontario. Peer-reviewed literature was searched using terms related to 'child' or 'adolescent', 'mental health' and 'transition' using CINAHL, EMBASE, HealthSTAR, MEDLINE, PsycINFO, Proquest, and Web of Science databases and references tracking were tracked. The results were refined through separate searches pertaining to: 1. Transitions definitions; 2. Care philosophies in child and adult mental health services; 3. Developmental Transitions Interventions Effectiveness; 4. Transition Programs and Services Effectiveness; 5. Use and effectiveness of peer support; 6. Information technology to improve transitions; 7. Social support during transitions; and 8. Economic considerations. Articles were selected based on title/abstract review, full article review and quality assessment. The initial search identified 37,960 articles pertaining to child and youth, mental health and transitions. For each search, between 6 and 27 articles proceeded to full text review depending on the theme. Philosophical differences between child (family centred, supportive, team-based) and adult services (individual, responsibility-driven, focused on serious mental illness) challenged effective transitions. Both multifaceted (across jurisdictions) and specialized health service programs were identified to address various domains of developmental transitions. Evaluation of programs and services revealed a scarcity of interventions and a lack of communication between child and adult services. Peer support, social support and information technology were potential contributors to successful transitions. Evidence suggested caregiver financial burden and patient out-of-pocket costs were substantial; however, no system-level comparative economic analyses were identified. The project set out the ambitious task of synthesizing findings of eight detailed systematic reviews that address multiple considerations in a priority area of health systems improvement. Although evidence was limited in many theme areas, differences in philosophy, programs, services and communication are identified as important elements of effective transitions.

Co-Author(s): Gillian Mulvale, McMaster University; Patricia Wakefield, McMaster University; Briano Di Rezze, McMaster University; Mark Embrett, McMaster University

22 Childhood Cancer Survivors Lost to Follow-Up: Canadian Recall Initiatives**HAROON HASAN**, BC Cancer Agency

The study objective was to describe Canadian initiatives to recall childhood cancer survivors (CCS) lost to follow-up and expert opinion regarding reasons for recalling these survivors. Health care professional (HCP) members of the C17 Council, an organization representing the 16 pediatric hematology, oncology and stem cell transplant programs across Canada, completed an online survey. Preliminary results from sixty-five (33%) HCPs representing 10 of the 16 Canadian pediatric oncology programs, completed the survey. The participants indicated that few formal initiatives to recall CCS lost to follow-up had been undertaken and these varied in comprehensiveness due to lack of resources. With significant provincial variability, recall initiatives have not been uniformly optimal and there is a Canadian cohort of CCS who remain lost to follow-up and are unaware of their health risks. The participants agreed that ethical principles mandate recall programs (77%), recall is essential to organize appropriate cancer and late effects screening programs (97%), the responsibility for recalling CCS lay with the pediatric institution that treated the CCS (79%), and that the benefits of recalling CCS outweigh the risks (92%). There is no systematic approach to recalling CCS lost to follow-up in Canada and lack of resources is hindering recall initiatives, despite widespread endorsement by HCPs. Recall initiatives supported by a national policy are essential for ensuring Canadian CCS are informed of their health risks and receive appropriate screening and surveillance to reduce morbidity and early mortality.

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6 Do community-based mental health crisis services reduce the burden of psychiatric presentations to emergency departments?**DIANA CLARKE**, Associate Professor and Associate Dean, University of Manitoba, Faculty of Nursing

A community-based mental health crisis centre (CRC) was established in Winnipeg to provide an alternative to emergency department (ED) services. Analysis of a psychiatric emergency nursing database is being used to determine the extent to which this resource impacts frequencies and types of mental health presentations to regional EDs. An administrative database details each encounter a psychiatric emergency nurse (PEN) has with a patient in an ED in Winnipeg. Examples of data available include patient demographics, triage levels, Mental Health Act status, presenting complaints, service providers involved, nursing interventions employed, and disposition. Data are available for the time period six months on either side of the opening of the CRC near the city's largest tertiary care hospital. In order to better understand and plan for regional alignment of services, a comparison of pre and post data illustrates the resulting shift in the presentations to the ED and is informing care and services to this population. On average, numbers of patients seen by PENs have remained similar to pre-CRC levels. Presentations within the various triage levels are similar as well with the notable exception of a significant reduction in non-urgent patients. The typical weekend spike in presentations to EDs is not being seen ostensibly because the CRC is available seven days a week. Although not reflected in triage levels, PENs are reporting more patients being brought in by police and needing security services after arrival. There has also been a small increase in the number of patients presenting involuntarily under the Mental Health Act. The majority of individuals presenting (75%) do not have a current mental health care provider. To date, the opening of the CRC has not resulted in as much of an impact on care provided to mental health-related presentations in EDs as was expected. An apparent increase in acuity will be monitored to ensure that the care provided in the ED is appropriately matched.

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18 Does Team-Based Primary Care Achieve its Prevention Goals? Screening in Quebec's Family Medicine Groups**JULIE FISET-LANIEL**, Research assistant, Direction de santé publique de l'ASSS de Montréal / Université McGill

We evaluated the impacts of team-based primary care delivery models on the provision of guideline-recommended preventive health care services. Specifically, we estimated the effects of Quebec's Family Medicine Groups (FMGs) on rates of screening mammography, bone density testing and colonoscopy/sigmoidoscopy among age-appropriate patients with chronic illnesses. We built a longitudinal administrative dataset of the population of vulnerable patients (elderly or chronically ill) in Quebec, characterizing all individuals as FMG enrollees ($n=3D122,677$) or not ($n=3D674,571$). Given the voluntary nature of FMG enrollment, we adjusted for baseline differences between FMG and non-FMG enrollees using propensity scores based on demographic, socioeconomic, clinical, and health care utilization data in the two years preceding registration as vulnerable. Multivariate difference-in-differences regressions were used to estimate the average treatment effect of FMGs. Five years of post-enrollment longitudinal data allow an adequate follow-up period to observe changes in the provision of guideline-recommended preventive care services. Preliminary results suggest no detectable effect of FMG enrollment on the rate of screening mammography among women aged 50 to 69 years old, on bone density testing among women aged 65 and over, or on colonoscopy/sigmoidoscopy screening among patients aged 50 years and over. While rates of mammography and colonoscopy/sigmoidoscopy increased over time, they did so at similar rates among both FMG enrollees and patients in traditional primary care practices. Similarly, while rates of bone density testing decreased overtime, the decrease was equivalent in the two groups of patients. The null effect of FMGs on the provision of preventive health care services was unexpected. Indeed, given the structure of FMGs (interdisciplinary teams, network with specialists and social services) and their inclusion of nurses, we expected them to have a comparative advantage relative to general practitioners in traditional settings.

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43 Effects of Housing First on employment and income of homeless individuals: results of a randomized trial**DANIEL POREMSKI**, Student, McGill University

Housing First (HF) is being established as an evidence-based practice for the treatment of homeless people with a mental illness. The objective of the present study is to determine if HF increases employment in this population. We also seek to determine if informal and illegal sources of revenue change. Between October 2009 and March 2011, a sample of 2148 people with recent experiences of homelessness and mental illness were recruited from five Canadian cities. Participants were classified into two groups based on need level and then randomized to either HF or treatment as usual (TAU). Participants with high needs received HF provided by assertive community treatment teams while those with moderate needs received services provided by intensive case management teams. Interviews at three month intervals included questions about vocational activities and earnings. Regression models estimated via generalized estimating equations were applied to determine the effect of HF on obtaining employment. The median follow-up time was 720 days with an interquartile range of 645 to 737. Participants receiving HF had less chance of obtaining employment compared to TAU: adjusted odds ratio for high needs of 0.62 ($p=0.011$, 95%CI 0.43-0.90) and 0.67 ($p=0.006$, 95%CI 0.50-0.89) for moderate needs. Odds ratios are adjusted for age, gender, location, and housing stability. Statistically significant differences were also observed between locations, specifically, site specific interaction supports the conclusion that participants belonging to the moderate needs group in Montreal receiving HF tended to work more than their counterparts at other sites. A site specific sub-study of supported employment may have influenced the group's likelihood of working. Trends in earnings suggest that, over time, participants earn more disability benefit income and less welfare. The trends observed in this study suggest that HF alone does not increase the probability of obtaining work. This trend does not hold true at the one location where supported employment services were offered as a sub-study. This suggests that supported employment may be an important adjunct to HF services.

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39 Enabling the Participation of Marginalized Populations through Community Development: A Case Study Analysis of Community Participation in Ontario, Canada**STEPHANIE MONTESANTI**, Postdoctoral Scholar, University of Calgary

To improve our understanding of community participation with marginalized populations we (1) identified the specific features of participation initiatives with marginalized populations (e.g., the approaches and methods); and (2) identified the challenges of engaging marginalized populations. We carried out a comparative analysis of four in-depth qualitative case studies of community participation initiatives in Ontario CHCs. Our data collection methods included 28 key informant interviews, a qualitative document analysis of publicly available and internal documents from each CHC, and site visits with each CHC to learn more about its day-to-day operations. Enabling the participation of marginalized populations requires CHCs to attend to the barriers experienced by marginalized populations that constrain their participation. A community development approach to participation was described to address the barriers related to marginalization and the associated social and cultural characteristics of the marginalized population. Limitations of the community development principles were demonstrated by cultural values and beliefs that shape the motivation and willingness of a marginalized population to participate in and resist efforts to enable their participation in health service planning and decision-making. There were similarities in the methods used to engage marginalized populations across our four cases. Community participation initiatives by CHCs have not been systematically evaluated to assess their effectiveness in eliminating barriers to participation that different marginalized individual's experience. The emphasis placed on community development principles assumes an underlying willingness to participate among all marginalized populations that is not supported by some populations' cultural values and beliefs. The absence of evaluation efforts may contribute to difficulties in knowing which methods are suitable for particular populations.

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3 Entitled Facts and Gaps in the Literature on IMGs: Mapping the Results from CHHRN Knowledge Synthesis & the IMG Database**IVY BOURGEOULT**, University of Ottawa

To synthesize the existing knowledge on International Medical Graduates (IMGs) in Canada to examine (a) what do we know about recruitment, integration, and retention of IMGs, and (b) how some of these knowledge gaps can be addressed through a more thorough exploitation of the IMG database. The synthesis reports on the findings of academic and grey literature sources published between 2000 and 2012 on IMGs which included 167 sources dealing exclusively with IMGs and 43 sources that examined IMGs and other health care professionals. The key themes that were highlighted in the literature extraction focused broadly on pre-immigration activities/programs, early arrival activities/programs, credential recognition & professional recertification, bridging and residency training programs, alternative paths to integration and workplace integration. The National IMG Database helps to illustrate how health profession databases might be used to provide metrics related to the key themes identified by the knowledge synthesis. The majority of IMG literature focuses on credential recognition ($n\%$) followed by workplace integration ($n=47$) and pre-immigration activities ($n=33$). Overall, the literature reports that IMGs struggle with navigating credential verification system and that cultural readiness, financial constraints and residency training in particular, constitute the key challenges for professional integration. Data from the National IMG Database corroborates a significant stepwise reduction in the number of IMGs who progress from initial evaluating exams to residency training and, ultimately, certification and licensure is evidenced. This is in spite of an overall increase in the number of IMGs entering residency training, which increased 67% compared to a 38% increase for graduates of Canadian medical schools from 2005 to 2011. More effort should be put into exploiting existing databases, like the IMG database, to support multi-methodological analyses. Although the IMG database captures data on those integrated into the system, we have little knowledge on IMGs who no longer practice medicine nor on the post-integration experiences of IMGs.

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48 Environmental Scan of Patient-Centred Innovations for Persons with Multimorbidity in Quebec and Ontario**BRIDGET L. RYAN**, Post-doctoral Fellow, Western University

To identify Chronic Disease Prevention and Management (CDPM) initiatives in Quebec and Ontario; to create a compendium of initiatives; to assess their link to primary care (PC), their focus on multimorbidity, the degree of patient-centred relationships and coordination and to identify initiatives that have robust evaluations. The Health Planning Approach was used to perform the Environmental Scan (ES) with the assistance of the Team's named decision-makers from the two provinces (Agence de santé et de services sociaux (ASSS) in Quebec; Local Health Integration Network (LHIN) in Ontario). Federal and provincial databases were also searched for existing lists of CDPM initiatives. Interviews were conducted with the coordinators of identified initiatives. A general profile of the various CDPM initiatives was generated including: program presentation, targeted clientele, results and impacts of the program and its evaluation. The ES identified 62 programs linked to PC, 69% of them led by PC and 95 % were patient-centred. The focus on multimorbidity is present in 56% of the programs. Only 47% of the programs have robust evaluations of the effects on patients and 45% have organisational evaluations. The following themes emerged from the ES: Revenue streams and delivery paths are complex and varied; Some programming in common but much is tailored to practice-level needs and expertise; Regional initiatives with recurrent funding are less evaluated than research innovations; Number of initiatives are single disease oriented; Increasing interest in engaging and collaborating with PC. The ES helped the Team to start building partnerships with the initiatives and identified programs interested in participating in the realist synthesis and possible program transformation. We observed an interest in multimorbidity and patient-centred delivery. The importance of evaluation was recognized but not conducted often.

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30 Establishing a performance measurement framework for primary care in Ontario**BRIAN HUTCHISON**, Senior Advisor for Primary Care, Health Quality Ontario

A systematic approach to primary care performance measurement is needed to provide useful information on a regular basis to inform planning, management and quality improvement at the practice and system levels. Our organization, in collaboration with key stakeholders, is developing a Primary Care Performance Measurement (PCPM) framework. The Steering Committee, comprising senior representatives of 18 stakeholder organizations, identified system and practice level measurement priorities across 9 domains based on an environmental scan, a summit of primary care stakeholders and a stakeholder survey. The Steering Committee established Measures and Technical Working Groups that include data and policy experts and patient and provider representatives. For each priority measurement area, the Measures Working Group ranks a set of potential measures using a survey tool. Guided by the survey results and a set of relevance and validity considerations, the Measures Working Group selects specific measures. The Technical Working Group then identifies technical specifications, appropriate data sources and required infrastructure. The Steering Committee provides recommendations for the ongoing implementation and governance of the PCPM framework. Priority measurement areas were identified across each of the 9 domains (Access, Effectiveness, Safety, Patient-Centredness, Efficiency, Focused on Population Health, Equity, Appropriately Resourced, and Integration). The Measures and Technical Working Groups are now working to prioritize specific measures for each measurement priority. Access and Patient-Centredness domains was completed in December 2013. 16 system-level measures and 8 practice-level measures for Access and 19 system-level measures and 16 practice-level measures for Patient-Centredness were recommended. Review of the remaining domains will be completed by May 2014. As Equity crosscuts the other domains, the Working Groups have identified potential equity lenses and analytic strategies for equity assessment as well as risk adjustment factors and methodology to permit comparisons across settings and over time. The final set of specific measures and recommendations on infrastructure, analysis and reporting are planned to be released in summer of 2014. The PCPM framework, developed through broad stakeholder engagement, can be used to assess primary care performance and act as a key enabler for strengthening primary care.

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9 Evaluating the feasibility of collecting patient-reported outcomes for elective surgical care in a large Canadian health authority: Experience from the field**TRAFFORD CRUMP**, Post-Doctoral Fellow, University of British Columbia

Patient-reported outcomes (PROs) are becoming an important performance measurement tool for many healthcare jurisdictions in Canada. The objective of this study is to report on the feasibility of collecting PROs from a population-wide sample of patients undergoing elective surgical procedures in Vancouver Coastal Health (VCH). The UBC research team collaborated with VCH and local clinicians, representing seven different surgical specialties, to identify patients electing for surgery. Participants were enrolled into the study through an initial telephone call; PROs instruments were administered through mail- and web-based survey. Participants were surveyed at three points during their episode of care: upon being registered on the surgical wait list, just prior to surgery, and after recovery. The PROs collected included a mix of generic (EQ-5D) and condition-specific health status measures. Data collection has been ongoing since September 2012. Approximately sixteen months into data collection, the study has contacted 2,623 patients from an eligible population of 4,582; 1,195 agreed to participate (response rate = 46%), but this varied across surgical specialties (from 34% in otolaryngology to 64% in urology). A subset of those contacted (n = 243) chose to participate by web-based survey, of which 156 completed the survey using this format (response rate = 64%). Data quality, to-date, has been acceptable, with approximately 3% of surveys returned either missing or with illegible data. The cost associated with executing this study has been \$77 per respondent. This represents both fixed and variable costs; the marginal cost falls rapidly, as the project's fixed costs are amortized over the total number of patients enrolled. This study demonstrates that collecting PROs from elective surgical patients across healthcare jurisdictions is feasible, with acceptable response and data quality rates. The cost of collecting these data is high, despite using the least expensive survey format. How this information is incorporated into VCH's performance measurement remains to be determined.

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5 Examination of Disparity in Access to Mental Health Services Among People Living with Human Immunodeficiency Virus (HIV) and Co-morbid Depression in Ontario**STEPHANIE K.Y. CHOI**, University of Toronto

Depression is a common co-morbidity among people living with HIV. However, many HIV+ individuals are not diagnosed or not treated, resulting in poor HIV treatment outcomes and increased health care costs. We aimed to describe barriers and gaps in accessing mental health services among this high-need population in Ontario. A retrospective cohort study was conducted from 2008-2012 by linking the Ontario HIV Treatment Network (OHTN) Cohort Study (N=3,545) with administrative health databases in Ontario through the Institute of Clinical and Evaluative Sciences. Co-morbid depression was identified based on the Center for Epidemiologic Studies Depression Scale (Scores > 10) or the Kessler Psychological Distress Scale (Scores >= 23). The use of primary and specialty mental health services was measured during the 12 months followed by the assessment at the baseline. Logistic and Negative binomial regression models were constructed to examine associations between socio-demographics and the use and the intensity of the use of mental health services. 950(27%) HIV+ study participants were identified with co-morbid depression. Of these, 523(55%) and 444(47%) had at least one visit to the primary care and specialist care respectively during a year followed by the baseline. For those who were depressed, we found that non-English speakers were two times less likely (OR:0.48;95%CI:0.31-0.77) to use of primary mental health services and were having 37%(IRR:0.63;95%CI:0.42-0.98) fewer encounters when compared to their English speaking counterparts. For accessing specialist care, we found that those who were identified as homosexual/gay, non-English speakers, immigrants, having low income and residing in rural area were two times less likely to use these services. However, being a homosexual/gay, being an immigrant, and having low income were likely to have 30-50% fewer encounters to specialist care. Careful considerations of the impact of language barriers and cultural differences are important to address in delivering successful mental health care for this high-need population of people living with HIV in Ontario.

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15 Factors Facilitating and Impeding Effectiveness of Interdisciplinary Primary Health Care Teams: A Systematic review of Canadian and international literature

MARK EMBRETT, PhD Candidate, McMaster University

Interdisciplinary primary care (IPC) approaches have gained widespread support in Canadian policy discourse. Previous qualitative work suggests considerable variation in the effectiveness of individual teams. The objective was to identify which factors that have been found to influence the effectiveness of team functioning in IPC models in Canada and other countries. We conducted a systematic review of the peer-reviewed literature on IPC delivery over the period 2000 to 2013 using Medline, Embase, CINAHL, HealthSTAR and Proquest electronic databases. The search string included variations on terms such as 'interdisciplinary team', 'primary care', 'collaboration' and 'team functioning'. The focus was exclusively on studies which attempted to measure, quantitatively, the impact of various factors or interventions on team effectiveness. In order to be included IPC teams had to have at least three different professions working together to meet the multiple primary care needs of a target patient population in a primary care. Our database search identified 838 articles, of which 26 met inclusion criteria based on title and abstract review. With the exception of education and training, the policy factors (including economic, regulatory, governance and political factors) suggested in previous qualitative research were not examined in the studies reviewed. Most reviewed studies focused on within team and personal factors (e.g. educational initiatives, role clarity, open culture within the team, strong leadership and professional culture and attitudes). The within team factors were sorted into four categories that included attitudes, formal team processes, social processes and team structure. Team meetings was the most commonly identified factor that influenced team effectiveness in the reviewed studies. The review confirmed importance of education and within team factors previously suggested. Evidence suggests opportunities for policy makers to enhance effectiveness of IPC teams. Efforts should be focused on interprofessional education and programs to enhance identified factors within individual teams. Further research on the effect of policy factors is needed.

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47 Frontline staff and senior leader perceptions of patient safety walkrounds

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Patient Safety Walkrounds, have emerged as a promising strategy for identifying specific patient safety problems and improving safety culture. However, there have been limited empirical research on walkround effectiveness. The purpose of this study is to explore frontline staff (FLS) and senior leaders (SL) perceptions of effectiveness of walkround programs at two academic hospitals. This study used qualitative research methods. Using purposive sampling, we recruited 11 SL, 30 FLS and 3 patient safety staff members from two hospitals. We selected nine walkrounds to observe based on the data and type of unit. Data collection utilized semi-structured interviews and the completion of observations notes for each walkrounds. Two researchers reviewed three interview transcripts independently and a coding template was developed to code remaining transcripts and observation notes. Applying the thematic analysis steps outlined by Braun & Clark, codes were organized into overarching themes through an iterative and inductive process. The results of this qualitative analysis are organized into three themes that demonstrate the different perceptions of walkrounds by FLS and SL at two academic hospitals. The inter-related themes are perceptions of: the purpose of walkrounds; patient safety problems and success of walkround. SL highlight SL visibility and commitment to safety as key benefits of walkrounds, whereas FLS clearly have expectations of improvements from walkround participation. SL also felt that many of the issues identified by the FLS did not fit with their conceptions of true patient safety issues. Finally, many of the SL saw success in having an open conversation with frontline staff, though FLS initially saw value in such conversations, with limited feedback and follow-up the FLS perceived value of walkrounds decreased with time. Though early reports of walkround programs were positive, recent studies have begun to show less positive results. This study provides insight into these results. Overtime, the positive impacts of walkrounds may decrease with FLS not seeing the improvements they expect and value to the patient safety problems most important to them.

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49 Hospital Readmissions among Homeless Patients in Toronto

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Despite high interest among decision-makers and researchers in examining hospital readmissions, few studies have focused on readmissions among patients who are homeless. The objectives of this study were to determine the 30-day hospital readmission rate among homeless adults, as compared to age- and sex-matched low-income controls, and to assess risk factors associated with hospital readmissions among the homeless cohort. A cohort of 1,165 homeless adults recruited from homeless shelters and meal programs in Toronto were matched by age and sex to low-income controls, and observed through administrative health data in Ontario from 2005 to 2009. We conducted multilevel logistic regression to determine the 30-day medical/surgical readmission rate among homeless participants and controls. Generalized estimating equations were used to account for data clustering from repeat hospitalizations. Multivariable analyses were conducted to determine risk factors associated with hospital readmissions among the homeless cohort. The homeless participants contributed 504 hospitalizations during the study period and 108 readmissions, compared to 122 hospitalizations and 10 readmissions among the controls. There was a higher crude (21.43%) and adjusted (9.41%) rate of readmission in the homeless cohort than among the controls (8.20% and 4.72%, respectively). Homeless patients had more than three times the odds of being readmitted within 30 days as compared to controls. In the homeless cohort, independent predictors of unplanned 30-day medical/surgical readmission included being discharged against medical advice and having a primary care physician, which was found to be a marker of lower pre-existing physical health status. Homeless adults are significantly more likely to experience a 30-day medical/surgical readmission as compared to age- and sex-matched low-income controls. In particular, homeless patients discharged against medical advice, and those with a primary care physician are at increased odds of 30-day readmission. Further research is needed to assess policies, practices and interventions to reduce hospital readmissions among patients experiencing homelessness.

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42 Identification of structural components of primary care practices associated with lower hospital utilization

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Primary care (PC) is the foundation of the Canadian healthcare. PC reform is a top priority in Ontario, with an increasingly popular PC delivery concept being the patient-centred medical home (PCMH). This study intends to identify the structural components of PCMH associated with better patient outcomes in the province. Sub-study within the Quality and Cost of Primary Care study, an international PC performance measurement study. Ontario family/general practice physicians were emailed invitations to participate. One physician per practice was allowed to enroll. Participants completed physician and practice surveys, and distributed patient experience surveys for completion by 9 patients per practice. Survey data measured the extent PC practices resembled PCMH. Survey data was linked with administrative data for all participating physicians' patients to capture non-urgent emergency department (ED) visits and ambulatory care sensitive (ACS) hospitalizations. Hierarchical logistic regression models determined the relationship between PC practice characteristics and patient hospital utilization. Survey data was collected from 183 PC practices and 1,760 patients. Results are being linked with administrative data. Surveys show 96% of patients report it was easy to get an appointment, 68% report different healthcare providers work together effectively in their care and 78% report it was not difficult to get referral to a medical specialist. 67% of PC practices use electronic medical records (EMR) to support prevention/follow-up reminders. Complete study findings will be available by March 2014. Based on the Canadian PCMH definition, we expect PC practices with higher accessibility to care, use of interprofessional teams, coordination of care, use of EMR to support patient safety and quality improvement, and access to resources/funding availability will be correlated with fewer ED visits and ACS hospitalizations. Results from linking comprehensive PC survey data with health administrative data in Ontario may support evidence-based decisions in the ongoing PC reform. Due to the central role that PC plays, stronger PC may lead to a positive change in the performance of the overall healthcare system.

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32 Impact of Health Literacy on Chronic Disease Management: A Literature Review**JENNIFER INNIS**, MA, NP, University of Toronto

The objectives of this literature review were to find out the characteristics of effective health literacy interventions in chronic disease management, the impact of these interventions on patient outcomes and to find out if there is evidence that these interventions impact use of acute care services. The management of chronic disease depends on a high level of self-management and this management can be challenging for patients with low health literacy. Patient education that is focused on the needs of individuals with low health literacy is a strategy that has the potential to improve patient outcomes. In October 2013, a search for health literacy interventions was completed using Ovid MEDLINE®. The inclusion criteria were interventions used with participants with low health literacy and participants with a chronic disease. Exclusion criteria were: interventions used in mental health and outcomes that were focused on advanced directives and informed consent. This review of the literature found 19 empirical studies that examined the use of health literacy interventions in chronic disease management. There were 6 types of interventions: self-management strategies, education sessions, phone calls, video, pill cards and demonstration of technique. The health literacy interventions that were the most effective had an individualized patient focus to meet the needs of the participants, used multiple modalities and emphasized self-management strategies. All of the studies demonstrated improved patient outcomes on at least one health-related outcome. These outcomes included decreased number of deaths, decreased acute care service use post-discharge, improved knowledge of disease, enhanced self-efficacy and self-confidence in management of a chronic disease, improved medication management and enhanced symptom monitoring. When patients have improved health outcomes, they have been found to have reduced use of acute care services. The use of health literacy interventions in chronic disease management has the potential to lead to decreased healthcare costs and improved use of acute care services throughout Canada.

52 Indicators of pharmaceutical sector performance from the 2013 Canadian Rx Atlas**KATE SMOLINA**, Post-Doctoral Fellow, Centre for Health Services and Policy Research (UBC)

Prescription drugs are a critical component of modern health care yet approaches to pharmaceutical policy and prescribing practices vary considerably across provinces. We sought to compare provinces in terms of the levels and trends in prescription drug use and cost by age, sex, and therapeutic category. We used IMS Brogan data describing the level of retail sales of all prescription-only medicines. Estimates of drug sales were provided by patient age, sex and province of residence. All drugs in the database were given a World Health Organization's ATC drug classification code. With data organized into this hierarchical system of drug classifications, we computed Fisher Ideal indexes to quantify how trends and variations are affected by the volume of drugs purchased, the types of drug selected, and prices paid. Retail spending on prescription drugs in Canada was approximately \$23 billion in 2012/13. Spending per capita ranged from \$511 in BC to \$821 in Quebec. This 60% spending difference across provinces persisted even after adjusting for age distribution of provincial populations. Differences in the volume of drugs purchased explained most of the differences in spending; however, differences in generic drug use and prices paid were also significant. Overall interprovincial variation in per capita spending was less than that observed within specific therapeutic categories. There were higher interprovincial variations in the therapeutic categories containing less commonly prescribed drugs. Age-standardized and inflation-adjusted prescription drug spending decreased by an average of 1.9% per year between 2007/08 and 2012/13 in Canada. Average rates of change varied across provinces, from declines of 3.0% or more in Ontario and PEI to an increase of 1.2% per year in Newfoundland & Labrador. Within particular therapeutic categories, changes over the five years ranged from steep decline to rapid growth. There is significant interprovincial variation in age-standardized prescription drug spending in Canada. Our data suggest that while differences in the underlying disease burden may account for some of the variations, other factors, such as differences in health policies and clinical practice, also have important impacts on prescription drug spending.

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38 Leaving Against Medical Advice: Characteristics Associated with Self-Discharge**DEREK LEFEBVRE**, Senior Analyst, Canadian Institute for Health Information

Each year, approximately 1% of acute care and emergency department patients self-discharge against medical advice at the risk of adverse health outcomes. The study examines the prevalence of self-discharge in Canada; characterizes patients who self-discharge against medical advice; and quantifies its impact on the health care system and patient outcomes. All 2011-2012 adult inpatient acute care discharges (excluding Quebec) from the Canadian Institute for Health Information's Discharge Abstract Database and Ontario Mental Health Reporting System as well as emergency department discharges in Ontario and Alberta from the National Ambulatory Care Reporting System were used in this study. Self-discharges were defined as those who left against medical advice or did not return from leave. Compared with patients routinely discharged, self-discharged patients were typically younger males, lived in lower income neighbourhoods, were diagnosed with a mental health or substance use disorder and had a history of leaving against medical advice. Self-discharged patients were more than twice as likely to be readmitted to acute inpatient care within a month (24% versus 9%) and more than three times as likely to visit the ED within a week (35% versus 11%), compared with those routinely discharged. Leaving against medical advice has a significant impact on the health system and on patient outcomes. To decrease the number of these discharges and minimize the negative effects, strategies such as improving continuity of care and access to targeted community-based services, and taking a more patient-centred approach could be implemented.

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14 Lessons from the Field: Formalized Resource Allocation in a Healthcare Institution with a Pediatric Tertiary Care Mandate**LAURA R. DOWLING**, Research Assistant, Strategy & Organizational Performance, IWK Health Centre

This study aims to develop a policy to guide decision-makers in pediatric tertiary care facilities who are challenged to allocate funds in an environment of limited resources. We are investigating whether Canadian healthcare institutions with pediatric tertiary care mandates have unique dimensions affecting formal priority setting and resource allocation practices. Part I is a retrospective evaluation of the implementation of Program Budgeting and Marginal Analysis (PBMA), a formal resource allocation process, which was implemented in the 2012/13 fiscal period at the IWK Health Centre. Individual interviews with administrators and clinical leaders who took part in the process have been conducted and are being analyzed using narrative enquiry methodology. Part II is an on-line survey of the senior decision-makers from other similar institutions across Canada, including the board members of the Canadian Association of Pediatric Health Centers (CAPHC). Thus far, our analysis has unearthed key findings on issues such as stakeholder buy-in, process fairness, and how the public should be involved in resource allocation decisions. The results from this project will be presented at a roundtable meeting that will be attended by the decision makers from the Canadian pediatric healthcare centers and established researchers in the area of priority setting and resource allocation from within Canada and internationally. The recommendations advocated for through these research efforts will focus on identifying the policy options for implementing a formal resource allocation approach in pediatric tertiary care centers, so that this knowledge can be utilized by health administrators in such organizations to improve system sustainability and accountability. The understanding of the unique organizational and cultural factors in a pediatric tertiary care setting in the context of priority setting and subsequent informed strategic management will facilitate the development of policies aimed at enhancing organizational performance through evidence-based, ethical, and financially-sound resource allocation.

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35 Making Research Results Relevant and Useable: Presenting Complex Data to Non-Research Stakeholders in the Nursing Home Setting

JENNIFER KNOPP-SIHOTA, Assistant Professor, Athabasca University

The extent to which evidence is translated into action is often dependent on the success of communicating often complex data not only to those who manage the system but also to those who deliver the care. We sought to describe the methods we used to present complex research data to non-researcher stakeholders. To illustrate an effective technique of presenting complex data, we used previously collected data within our program of research, Translating Research in Elder Care (TREC). In TREC, we focus on improving the quality and safety of care delivered to nursing home (NH) residents. We used k-means cluster analysis to separate NH facilities and care units into subgroups based on organizational context (work environment) in order to study context as it relates to bedside knowledge use and clinical outcomes. We then produced simple scatter plots to illustrate the subgroup differences. Focus groups were conducted to determine the usefulness of our data reporting method. Concepts related to organizational context (10 variables) clustered on two non-overlapping dimensions. We interpreted these clusters as 1) facilities or care units with higher levels of organizational context (favourable) or 2) facilities or care units with lower levels of organizational context (less favourable). Using scatterplots, we compared the subgroups based on urinary tract infections and indwelling catheters and found that NH facilities with low rates of both urinary tract infections and indwelling catheter use were higher in organizational context. We then compared the groups based on bedside research utilization and found that those with more favourable organizational context reported higher research utilization when delivering care to residents. We created customized reports utilizing these graphs allowing stakeholders to assess individual care unit / facility differences recognizing the significance of organizational context to positive clinical outcomes. Focus group feedback was very positive, although we have not yet formally evaluated these procedures. Our method of presenting complex data appears to provide deeper insight into interrelationships between multiple variables for stakeholders who are not advanced users of statistics. Tailored messages are the most effective means of conveying research results to heterogeneous target audiences of research participants, administrators, or policy makers.

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54 Measuring Inequity in the Canadian Health System: The Sensitivity of Results to Alternative Assumptions Regarding the Degree of Aversion to Inequality

MARJAN WALLI-ATTAEI, PhD Student, McMaster University

The concentration index (CI) is the prevalent method used for measuring income-related inequity in health and health care utilization. However the CI contains specific value judgments regarding the strength of citizens' dislike for (or aversion to) health-related inequalities. This study evaluates whether conclusions regarding equity in the Canadian health system is sensitive to the alternative assumptions regarding the degree of aversion to income-related inequality. We applied the concentration index and its variants (Extended CI, Generalized CI and the Symmetric Index) to the 2009 Canadian Community Health Survey (CCHS), while varying the value of the inequality aversion parameter. We measured income-related health inequalities using the Health Utilities Index (HUI) as a measure of health status and self-reported general practitioner visits, self-reported specialist visits, and in-patient hospital nights as measures of health care utilization. For health care utilization, a two-part model was used to distinguish between those with no utilization and those with positive amounts of utilization. To measure inequity, an indirect standardization method was used to adjust for need. Our results indicate that estimates of income-related inequity in health and in the utilization of health care services vary substantially over plausible values of the income-related inequality-aversion parameter. The probability of having at least one GP visit, for example, is distributed pro-rich using all three indices. However, it becomes notably more pro-rich as the inequality aversion parameter increases. Furthermore, estimates of income related inequalities are numerically very different when looking at the Generalized Extended CI and Symmetric Index. Visit intensity for a GP yields pro-poor results using all three indices, and becomes increasingly pro-poor as the inequality aversion parameter increases. Once again, the estimates obtained from the Extended CI, Generalized CI and Symmetric index are very different. Similar findings are observed for the health utilities index, specialist visits and in-patient hospital nights. Health equity is widely acknowledged to be an important policy objective. An ideal measure of inequality is both technically valid and based on ethical assumptions that correspond to the values of society. As this study shows, measuring inequalities is not a value-neutral process. Researchers need to be more explicit on the value judgments that underlie their estimates.

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8 New comparable CIHI indicators on sepsis, in-hospital infections and surgical site infections

CHANTAL COURIS, Manager, Indicator Research and Development, Canadian Institute for Health Information

Timely prevention, identification and appropriate treatment of in-hospital infections lead to improved outcomes. The objectives of this project are to develop and report on a regular basis pan-Canadian, comparable indicators on in-hospital sepsis event rate, sepsis mortality, in-hospital infections (C. Difficile, MRSA, VRE) and surgical site infections using administrative data. Enhancements to Canadian Coding Standards, such as introduction of clusters, prefixes and clarifying examples, have been made in the recent years to allow capturing of post-intervention conditions and drug-resistant microorganisms. CIHI administrative databases (Discharge Abstract Database and Hospital Morbidity Database) are used to identify cases and calculate the rates. Regression modelling is used to adjust for factors affecting rates and mortality. Hospital-level results are calculated for the indicators. Summary of the results will be presented for the four indicators. Factors influencing the results and being adjusted for will be discussed. Where possible, the data will be compared against publicly reportable results on in-hospital infections obtained using surveillance data. Conclusions will be based on the results presented. Reporting on comparable in-hospital infections indicators will ensure that facilities and jurisdictions will take necessary interventions when required, as demonstrated by a longitudinal study in Ontario that showed a decline in C. Difficile rates following mandatory public reporting (N. Daneman et al.)

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12 Partnering for a Common Quality Agenda (CQA)

GAIL DOBELL, Director, Research Methods and Evaluation, Health Quality Ontario

Indicator fatigue and competing priorities have been identified as performance measurement issues in Ontario. This presentation will describe this organization's journey in the development of a conceptual framework, selection of priority indicators and the development of a reporting strategy as a mechanism for focusing health system improvement. A mixed methods approach is being used to develop the Common Quality Agenda (CQA) framework and reporting strategy. Clinical experts, environmental scans of Ontario, pan-Canadian, and international performance frameworks and indicators, data analysis, surveys and consensus building sessions with ministry, health care provider, academic, and other stakeholders were used over a twelve month period to develop and refine the framework and identify the building blocks of the public reporting strategy. The CQA framework includes 36 existing indicators and 4 priorities for new indicator development. The framework balances indicators aligned to other reporting strategies, and those new to public reporting but reflective of clinical best practice. Finally, the framework is comprehensive in scope with integrated cross-sector indicators, and sector-specific indicators for hospital, primary care, community-based care, long-term care, mental health, public health, and health human resources. Pan-Canadian or provincial benchmarks exist for many selected indicators. Partnership tables will use a modified-Delphi process to establish remaining benchmarks. A reporting strategy for CQA indicators is in development. Some indicators will likely be reported in a yearly report at regional and provincial levels. Other indicators will be reported at the facility level, using a variety of reporting mechanisms. The Common Quality Agenda is a long-term strategy that uses performance reporting as a mechanism for focusing the health care system on priorities for quality improvement. Built using a partnership approach, the framework, selected indicators and reporting strategy reflects diverse stakeholder interest yet enjoys strong health system endorsement.

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29 Patients' reasons for choosing the emergency department instead of the family physician for low acuity complaints over Christmas holidays

MICHELLE HOWARD, Assistant Professor, McMaster University

We investigated the reasons family practice patients used an emergency department (ED) or urgent care centre (UCC) for low acuity visits during the Christmas season 2012 when the family doctor was available (every day except December 25, during which time telephone triage to an on-call physician was in place), despite efforts to inform patients of availability. The setting was two family practice clinics that comprise a Family Health Team serving approximately 30,000 patients in an urban centre. Patients aged 18 and older (or parents of patients aged 17 and younger) who visited an ED/UCC between Dec 24 2012 - Jan 2 2013 during times the family doctor was open and whose visit was coded as low acuity, were surveyed. A cross-sectional postal survey of low acuity ED/UCC patients, with telephone follow-up of non-respondents was conducted. The survey asked about knowledge of the family practice hours, attempts to reach the family practice and reasons for choosing the ED/UCC. The response rate was 50% (n). There were slightly more female (54.4%) than male (45.6%) respondents. Nearly one-third (28.9%) were under the age of 20. Fewer than half of respondents (30.4% - 46.7%) had knowledge of the family practice availability during weekends and holidays. The most common reasons for choosing the ED/UCC when the practice was open were that the problem was perceived to be too serious, the patient wanted immediate testing or the patient believed the practice was closed. The most surprising finding was that despite efforts to inform patients of office hours, there was a perception that the practice was unavailable. If reducing low acuity ED/UCC visits when the family practice is available is a goal, more innovative methods of communicating with patients and changing behaviour will need to be designed and tested.

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21 Patterns of Care for Children who are Persistently High Resource Utilizers: Implications for Policy

ASTRID GUTTMANN, Senior Scientist, ICES

To describe the characteristics, costs, and patterns of health care use among pediatric (high resource utilizer) HRU patients and analyze the clinical and socio-demographic predictors of persistently high utilization in a population-based sample in a universal health insurance system. Complete health system use and costs were analyzed for all non-newborns (< 18 yo) in Ontario, Canada (population 14 million) from 2007-2012 using linked health administrative databases. HRUs were defined as the top 1% of the population in terms of total cost in 2007. Persistence was defined as ongoing top 1% in the subsequent four years. We used logistic regression to test the association of clinical and socio-demographic characteristics with persistence. 28,642 children were in the top 1% in 2007 (median [IQR] cost Canadian \$22,945 [\$13,419, \$49,316]). In the four subsequent years, 138 (0.5%) died, and 2,472 (10.5%) persisted in the top 1% of costs. The highest rates of persistence were among those with neurological impairment (38%) and multiple complex chronic conditions (16%) as compared with more acute, self-limiting problems such as trauma and severe infections (both <1% persistence). In multivariable analyses, those with technology assistance were four times more likely (aOR 3.86, 95% CI 3.46 - 4.29) to be persistent HRUs. Socioeconomic status was not associated with persistence. Among the persistent HRUs, home care use was the largest contributor to cost (58.3% of total) followed by inpatient use (15.4%). 37% did not have any inpatient use in the follow-up period although 82% had an Emergency Department visit. Pediatric HRU populations characterized by technology assistance, neurologic impairment and complex chronic conditions are most likely to have continued high healthcare costs although the majority do not have persistently high costs year over year. Policy focused on bending the cost curve by targeting pediatric HRU inpatient use may not result in substantial savings.

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53 Policy entrepreneurship - is there room for public health professionals to speak up against anti-vaccination movements in cyberspace?

MELODIE (YUN-JU) SONG, PhD Student, McMaster University

Online anti-vaccination movements across North America have resulted in low vaccination rates, thwarting efforts in vaccine-preventable disease prevention. In an era of media 2.0, the under-utilization of real-time content-sharing and engagement in online dialogues by the public health officials against anti-vaccination creates salience for misinformation. Government agencies and non-for-profit organizations for vaccination will be identified based on the agencies' involvement on vaccination education in the traditional media (i.e. print news, television) and the new media (internet, podcasts) in Ontario. Using the theory of social construction, this study identifies the quadrants of social hierarchy to which key supporters and opponents in the online anti-vaccination community. To measure agency engagement in countering anti-vaccination movement, the salience of social mentions, frequency of Blog posts, and number of responses on virtual feeds (i.e. Tweets, Facebook messages, comments, etc.) will be recorded between 2013/12-2014/03. Applying Kingdon's multiple streams framework, this study examines the means in which agencies can engage in policy entrepreneurship to create opportunities to couple three streams to counter anti-vaccination movements. Preliminary results identified provincial public health agencies as key-players in vaccine education. In the online community, government agencies belong to the advantaged quadrant in the social construction. Non-for-profit organizations are perceived as either contenders or advantaged advocates for dependents. Agencies supporting anti-vaccination movements are perceived as deviants and advocates for dependents. As of January of 2014, the results for measuring agency engagement shows little saliency in favor of vaccine education and long saliency in favor of anti-vaccination movements. In the multiple streams framework, policy entrepreneurship from government agencies in the political stream are less prominent than non-for-profit agencies. Policy entrepreneurship from agencies supporting anti-vaccination movements have successfully created issues in the problems stream, presented solutions in the policies stream, and gained momentum in the politics stream. In the advent of media 2.0, the role of government agencies' involvement or its lack thereof in the cyberspace needs re-evaluation. This research analyzes the multitude of approaches health policy-makers could counter saliency on health misinformation in online communities in a Canadian context.

41 Prevalence and Control of Diabetes Mellitus in Nova Scotia from Primary Care EMR Data: The Canadian Primary Care Sentinel Surveillance Network

NANDINI NATARAJAN, MD, CCFP, Department of Family Medicine, Dalhousie University

To determine the prevalence and describe the control of Diabetes Mellitus (DM) in primary care practices using electronic medical records (EMRs) in Nova Scotia. The Canadian Primary Care Sentinel Surveillance Network (CPCSSN) has developed a case definition algorithm to identify patients with DM from EMRs. In Nova Scotia the Maritime Family Practice Research Network (MaRNet-FP), one of ten regional networks of CPCSSN, has used this algorithm to identify patients with DM from community family physician and nurse practitioner practices that use the Nightingale EMR. Measures related to the control of these patients with DM are extracted from the EMRs. As of December 2013 there were 51 family physician and 7 nurse practitioner practices in MaRNet-FP. 55693 patients were seen at least once in these practices within a two-year period (active patient population). 4803 (9%) were identified with DM. 4505 (94%) had a clinic visit within the last 12 months. 3626 patients had a HbA1C in the last 12 months, and 1909 (53%) had a HbA1C of less than or equal to 7. 3533 patients had a LDL in the past 12 months and 1714 (49%) had a LDL less than or equal to 2. 3901 patients had a BP measurement in the last 12 months and 2058 (53%) had a BP below 130/80. Other measurements will be reported in the presentation. There was a high prevalence of DM in primary care practices in Nova Scotia. Most patients had at least one visit with their primary care provider within a year. Approximately 50% of patients with DM had a HbA1C, LDL and/or BP within the recommended targets set by the Canadian Diabetes Association.

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1 **Projet Clinique du Ministère de la Santé et des Services sociaux du Québec - État de la situation 10 ans après la conception**

ABDULLAH AFZAL, Candidat Maîtrise Gestion de Projet (UQO) et Chargé de projet et de programme (Agence Parc Canada), Université du Québec en Outaouais

L'objectif est de comprendre comment les connaissances produites en gestion de projet (Project Management Institute) peuvent constituer un levier dans l'atteinte des objectifs stratégiques de politiques de santé du Gouvernement du Québec (accessibilité, continuité, qualité) et en même temps en augmenter l'efficacité et l'efficience du système de santé québécois. Le Ministère de la Santé et des Services sociaux du Québec (réforme 2004) prend un tournant dans le domaine de la santé en proposant le projet et la gestion de projet comme levier à l'aboutissement de ses objectifs. Le Projet Clinique est privilégié afin d'augmenter l'accessibilité, la continuité et la qualité des services en santé. Dix ans plus tard, la réforme tarde à se déployer à la grandeur du Québec. Une analyse des Rapports annuels (quatre années consécutives) des Centres de santé et de services sociaux (CSSS) est faite afin de cerner les difficultés d'implantation du Projet Clinique. Un total de 324 Rapports annuel de 79 CSSS et 2 centres régionaux (2008-2009, 2009-2010, 2010-2011, 2011-2012) ont été analysés, ce qui représente 17 sur 18 régions sociosanitaires du Québec. Le projet clinique est abordé dans 65% des rapports (210 sur 324). Seulement 30% de ces rapports font références directement à l'utilisation d'un ou plusieurs méthodes de gestion de projet tel que décrit par le Project Management Institute. Les résultats soulignent également les difficultés que rencontrent plusieurs CSSS à implanter le projet clinique. Il est autant plus évident que les méthodes de gestion de projet pour mener le projet clinique sont presque inexistantes. Le Gouvernement du Québec est loin d'atteindre les objectifs stratégiques de politiques de santé souhaités depuis 2004. L'analyse démontre que les CSSS sont laissés à eux-mêmes pour définir et relever les défis de la réforme en santé au Québec. Un cadre de référence incluant les méthodes adéquates de gestion de projet (Project Management Institute) est proposé afin d'atténuer les risques et aboutir aux objectifs du Projet Clinique.

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44 **Risk Factors of Adverse Drug Reaction-Related Hospitalizations Among Seniors, 2006 to 2011**

JEFF PROULX, Program Lead, CIHI

This analysis examined potential risk factors for adverse drug reaction (ADR)-related hospitalizations and compared seniors' drug therapy pre-admission and post-discharge to see whether hospitalization led to changes in drug therapy. This analysis used hospital discharge data from the Discharge Abstract Database and drug claims data from the National Prescription Drug Utilization Information System Database to assess potential risk factors for ADR hospitalizations among seniors on public drug programs in Alberta, Manitoba and P.E.I. The number of drugs was the most significant risk factor, with seniors taking 15 or more drugs 6.4 times more likely than seniors taking fewer than 5 drugs to have been hospitalized for an ADR. Other factors associated with hospitalizations for ADRs were patient age and being hospitalized in the previous year. The relationship between new drug starts and ADR-related hospitalizations varied by drug class. 33.2% of seniors hospitalized for an opioid-related ADR started taking an opioid within 30 days of hospitalization, while only 28.2% of seniors hospitalized for an anticoagulant-related ADR started an anticoagulant within a year of hospitalization. Although it is often necessary for seniors to take multiple drugs to manage their chronic conditions, regular medication reviews can reduce the risk of adverse events. A high proportion of ADR-related hospitalizations related to anticoagulants occurred more than a year after starting therapy, which underscores the importance of ongoing monitoring.

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4 **Service use of youth with concurrent disorders**

AMY CHEUNG, Associate Professor, University of Toronto

Youth with concurrent disorders (co-occurring substance use and mental disorders) have poor access to services and yet have tremendous unmet needs. This study will examine the pattern of use of substance abuse services over time of youth with concurrent disorders (CD) compared to those with substance use disorders alone (SUD). We examined data from the Drug and Alcohol Treatment Information System (DATIS). DATIS collects and reports substance abuse treatment data from over 170 specialized services in Ontario. We examined data from youth with concurrent disorders aged 12 to 19 who initiated substance use services in 2005/6 and examined their service use pattern over the next 5 years compared to youth with only substance use problems. We examined the following characteristics of these groups: demographics, substances used, reasons for entry into treatment, length of treatment and reasons for discharge. Descriptive analyses of these groups were conducted. In 2005/6, approximately 3286 youth with CD and 5751 youth with SUD accessed substance abuse services in Ontario. Among youth with concurrent disorders, more males (57.0%) accessed services compared to females (43.0%). This gender difference widens numerically when we look at youth with only substance use disorders (males 68.6%, female 31.2%). The most common presenting problem was the use of cannabis (CD 67.5%, SUD 60.1%, $z=7$, $p<0.0001$) with alcohol as the second most common problem substance (CD 59.6%, SUD 55.1%, $z=4.2$, $p<0.0001$). The third most common problem substance reported was cocaine/crack (CD 39.7%, SUD 28.2%, NS). The majority of youth who accessed treatment did not have any legal issues at the time of entry into treatment (CD 64.6%, SUD 61.4%, $z=3$, $p=0.0025$). However, a larger proportion of youth (26.2%) with SUD were mandated to treatment through parole or probation versus 19.2% of youth with CD ($z=7.5$, $p<0.0001$). Only 38.5% of CD youth completed the treatment program compared to 44.6% of youth with SUD ($z=5.6$, $p<0.0001$). Between 2005 to 2011, 38.2% of CD youth re-entered treatment for substance abuse versus 42.6% of youth with SUD alone ($z=4.3$, $p<0.0001$). The results demonstrate there are differences between the CD and SUD populations in terms of use of treatment services, legal issues, and rates of re-entry. This is the first examination of these difference in the Ontario health care context and further exploration may help with treatment planning and program development.

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55 **The association between diabetes and risk of bleeding for patients with chronic kidney disease initiating warfarin therapy**

JAMES WICK, MSc. Student, University of Calgary

Patients with chronic kidney disease (CKD) and diabetes are at high risk for adverse outcomes. We sought to determine whether the risk of major bleeding in patients with atrial fibrillation and CKD receiving warfarin therapy is increased with the presence of diabetes. We used linked administrative and laboratory data to identify a cohort of patients in Alberta with atrial fibrillation and CKD (estimated glomerular filtration rate [eGFR] <60 mL/min/1.73 m²) who initiated warfarin between May 2002 and March 2011. We conducted a time-to-event analysis to determine the association between diabetes and occurrence of major bleeding (defined as hospitalization for intracerebral hemorrhage, upper or lower gastrointestinal hemorrhage, or any other hemorrhage), adjusting for demographic information, comorbid conditions and CKD Stage. Patients were censored at the bleeding event, out-migration, death, or the end of the study (March 31 2011). In total, 6008 patients with CKD and atrial fibrillation initiated warfarin therapy during the study period, of which 402 (6.69%) had diabetes. Overall, 734 (12.22%) had a major bleed, including 49 (12.19%) patients with diabetes, and 685 (12.22%) patients without diabetes. Compared to patients without diabetes, those with diabetes were younger (mean age 78.78 vs. 79.63), had a higher Charlson comorbidity score (mean 4.56 vs. 3.15), and a higher prevalence of end stage renal disease (15.17% vs. 13.08%). The unadjusted hazard ratio (HR) for the association of diabetes with major bleeding events was 1.06 (95% CI: 0.79-1.42). After adjusting for age, Charlson comorbidity score, and CKD stage, there was no association between presence of diabetes and risk of major bleeding (HR 0.84; 95% CI: 0.62-1.13). In patients with CKD and atrial fibrillation receiving warfarin therapy, the presence of diabetes did not significantly increase the risk of major bleeding when compared to those without diabetes. These results may be used by clinicians and policy makers to guide indicated therapy for this high risk group.

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33 The challenges South Asian immigrants face in accessing the appropriate health care opportunities in the Greater Toronto Area (GTA)**S. M. TARIQUL ISLAM**, PhD Candidate, Laurentian University

The study's objective is to investigate the challenges/barriers South Asian immigrants face in accessing the appropriate health-care opportunities in the Greater Toronto Area (GTA) needed for maximizing their human development and to facilitate the creation of a model accommodating visible minority immigrant's challenges/barriers within the existing resources and system. I used mixed methods: qualitative and quantitative. I have collected primary data by survey questionnaire and focus group discussions. For my research, I have collected 307 survey questionnaires and administered five focus group discussions of South Asian immigrants living in the GTA. To analyze my data, I used SPSS for conducting descriptive statistics and Chi Square test. In addition, to analyze and measure the human development, I used Amartya Sen's capabilities and freedom approach. 'Human development' is used as a process of enlarging people's choices and enhancing human capabilities and freedoms, enabling them to live a long and healthy life. The preliminary result of this research shows that South Asian immigrants living in the Greater Toronto Area (GTA) facing multiple barriers/challenges in accessing to appropriate health care services. Among other barriers/challenges, almost 54% experienced language and 54.2% believe that different socio-culturally-based understanding about health and health care are barriers to access to appropriate health care services. The statistical results show that there is a significant relationship between South Asian immigrants' self-rated health before coming to Canada and after living Canada for some times and their self-rated health declined after living Canada for some times. The results also show that there are significant relationships between the South Asian immigrants' current self-rated health and the variables related to accessing barriers to health care services. The South Asian visible minority immigrants are the fastest growing immigrant group in the GTA. The results show that they are facing significant barriers in accessing health care services. As a result, their health is deteriorating and their human development is being compromised, affecting their integration into a new society.

16 The Cost-Effectiveness of Primary Screening for Chronic Kidney Disease: A Systematic Review**THOMAS FERGUSON**, Graduate Student, University of Manitoba, Department of Community Health Sciences

To determine the cost-effectiveness of screening for Chronic Kidney Disease (CKD) in the general population by measurement of either proteinuria/microalbuminuria or estimated glomerular filtration rate (eGFR). We also aimed to quantify the cost-effectiveness of screening in higher risk subsets of the population including those with diabetes and/or hypertension. We performed a systematic review of the available literature. Databases searched included Pubmed, Scopus, EMBASE, and Cochrane Database of Systematic Reviews, searched from their establishment until June 2012. Studies were included that evaluated the cost-effectiveness screening in the general, hypertensive, and diabetic populations with no restriction on setting. The primary measure of outcome evaluated in the review was the incremental cost-effectiveness ratio (ICER) of screening by proteinuria or eGFR as compared with either no screening or usual care. Data was extracted by two independent reviewers with any disagreements resolved by consensus. Nine studies met criteria for inclusion. Eight studies evaluated the cost-effectiveness of proteinuria screening and two evaluated screening with eGFR. For proteinuria screening, the ICERs ranged from \$14,063 to \$160,018 in the general population, \$5,298 to \$54,943 in the diabetic population, and from \$23,028 to \$73,939 in the hypertensive population. For eGFR screening, one study reported a cost per QALY of \$23,680 in the diabetic population and the range across the two studies was \$100,253 to \$109,912 in the general population. The incidence of CKD, rate of progression, and the effectiveness of drug therapy were major drivers of cost-effectiveness. Screening for CKD is suggested to be cost-effective in patients with diabetes and hypertension. CKD screening may be cost-effective in populations with higher incidence of CKD, rapid rates of progression, and more effective drug therapy.

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7 The Determinants of Home Death in an End-of-Life or Palliative Care Population**VANIA COSTA**, Clinical Epidemiologist, Health Quality Ontario

As part of a mega-analysis on end-of-life care we sought to evaluate the determinants of home death in an end-of-life or palliative care population. A systematic review of the literature was undertaken in order to identify randomized controlled trials, observational studies, or prior systematic reviews published between January 1, 2004, and September 24, 2013 that evaluated the determinants of home vs. hospital death. Determinants related to the illness, environment, (living arrangements, support to caregiver) healthcare system (hospital bed availability, home visits), patient and family preference were evaluated. The adjusted odds ratios (ORs) and 95% confidence intervals (CIs) as reported in multivariate analyses were summarized. Meta-analyses were performed when appropriate. The quality of body of evidence was evaluated according to the GRADE working group criteria. Four systematic reviews and 26 observational studies were eligible, mostly retrospective cohort studies based on administrative databases. Three studies (11.5%) were from Canada, 3 (11.5%) from the United States, and 8 (30.8%) from Europe. Ten (62.5%) studies included patients receiving multidisciplinary home care. 10 (62.5%) were restricted to cancer patients. Factors increasing the likelihood of home death included multidisciplinary home care team (OR: 8.40 [95% CI: 4.67-15.09], 1 study), home/hospital-based hospice care (OR: 1.47 [95% CI: 1.22--1.77], 1 study), and home visits by family physicians in patients receiving home care (OR: 2.26 [1.35--3.78], 3 studies, I²=3D22%). Admission to a hospital having a multidisciplinary palliative support team or hospice unit decreased the likelihood of home death (OR: 0.54 [0.33-0.89], 2 studies, I²=3D18%). Various factors enable deaths outside of acute care, including multidisciplinary home care team or home visits by family physicians increasing the likelihood of home death, or the presence of a multidisciplinary palliative care team or hospice unit increasing the likelihood of death in a hospice or palliative care setting.

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17 The Diagnostic Accuracy of the Tuberculin Skin Test, QuantiFERON-TB Gold, and T-SPOT.TB in Determining Latent Tuberculosis Infection in Hemodialysis Patients**THOMAS FERGUSON**, Graduate Student, University of Manitoba, Department of Community Health Sciences

To evaluate the diagnostic accuracy of the Tuberculin Skin Test (TST), QuantiFERON-TB Gold (QFT-G), and T-SPOT.TB in determining latent tuberculosis infection in the dialysis population. We performed a systematic review of the available literature. Databases searched included Pubmed, Scopus, EMBASE, and Cochrane Database of Systematic Reviews, searched from their establishment until August 2012. We selected studies with adequate information to ascertain test sensitivity or specificity of the TST, QFT-G, and T-SPOT.TB with regards to determining latent tuberculosis infection in the dialysis population. Data was extracted by two independent reviewers with any disagreements resolved by consensus. Sixteen studies met criteria for inclusion in the meta-analysis. The TST had a pooled sensitivity of 31% (26-36%, 95% confidence interval) and a pooled specificity of 63% (60-65%) across 8 studies. The QFT-G test had a pooled sensitivity of 58% (51-65%) and a pooled specificity of 69% (65-72%) across 8 studies. The T-SPOT.TB test had a pooled sensitivity of 50% (42-59%) and a pooled specificity of 67% (61-73%) across 3 studies. The QuantiFERON-TB Gold and the T-SPOT.TB tests were more sensitive than TST for diagnosis of latent tuberculosis infection in patients on dialysis. This systematic review calls into question the current practice of using the TST to screen in this population, especially in patients considered for kidney transplantation.

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51 The effect of publicly funded, school-based human papillomavirus (HPV) vaccination on clinical indicators of sexual behaviour among adolescent girls**LEAH SMITH**, McGill University

Canada's six-year-old publicly funded, school-based HPV vaccination programs continue to be controversial, partly due to a lack of information on their potential unintended effects. The objective of this study was to investigate the impact of Ontario's Grade 8 HPV vaccination program on clinical indicators of sexual behaviour among adolescent girls. Using Ontario's administrative health and immunization databases, we identified a population-based cohort of all girls in Grade 8 in 2005/06-2006/07 (program ineligible) and 2007/08-2008/09 (program eligible). Exposure was defined as receipt of three HPV vaccine doses in Grades 8-9. Indicators of sexual activity (non-HPV-related sexually transmitted infections and pregnancy) were ascertained between Grade 10 and March 31 of Grade 12. Using the Regression Discontinuity Design (a quasi-experimental, instrumental variable-based approach), we employed local linear regression and log-binomial regression to estimate absolute and relative changes in incidence rates attributable to program eligibility (program impact) and actual HPV vaccination (vaccine impact). Our cohort consisted of 112,155 ineligible and 108,859 eligible girls (N=221,014). Baseline covariates and follow-up time (4.6 years) were similar between groups. 10% of ineligible girls were exposed to the HPV vaccine, as were 50.6% of eligible girls. We identified clinical indicators of sexual activity among 6.9% of cohort members and found that neither HPV vaccine program eligibility nor HPV vaccination had any statistically significant impact on this incidence, whether on the absolute scale (cumulative incidence difference (CID)=0.69 cases per 1000, 95% confidence interval (CI): -4.1, 5.5 and CID=1.7 cases per 1000, 95% CI -10.1, 13.5, respectively) or the relative scale (cumulative incidence ratio (CIR)=1.01, 95% CI 0.94, 1.07; CIR=0.99, 95% CI 0.84, 1.16, respectively). Results were robust to a number of sensitivity analyses. This large, population-based cohort study provides the first evidence that publicly funded HPV vaccination does not have any impact on indicators of sexual behaviour among females in Canada. These findings suggest fears of increased sexual activity following HPV vaccination are unwarranted and should not be a barrier to uptake.

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28 The impact of Nurse Practitioner-Led Group Medical Visits for Patients with Chronic Conditions in Primary Care**LAURA HOUSDEN**, University of British Columbia

This study examines the intersection of two primary care innovations, Group Medical Visits (GMVs) and Nurse Practitioners (NPs) by exploring the impact that GMVs with NPs have for patients with chronic conditions. A multi-site, instrumental case study design was used. The sites included 2 established GMVs with NPs and one conceptual case, with NPs who were not using GMVs. Methods included: direct observation of GMVs and individual interviews with patients and healthcare providers involved in the GMVs. Impacts of GMVs on patient-care were explored through use of the WHO Impact Assessment Guidelines- examining impacts in the context of social determinants of health. Within and across case comparisons were completed. Interviews were transcribed verbatim and analyzed using Nvivo. Fieldnotes from the direct observation were incorporated into the qualitative analysis. We report on three case studies in British Columbia. In total, 9 patients and 10 providers were interviewed and 8 hours of direct observation was completed. There was heterogeneity in NPs and healthcare providers using and facilitating different types of GMVs within each case. Emerging themes across cases include: revisiting the clinical encounter, engagement of patients and opportunities to develop relationships. The role of the NP varied within the cases, however strong acknowledgement of the need for an interdisciplinary team, leadership and nursing knowledge as an important contribution to GMVs was identified. The intersection in deployment of NPs and delivery of GMVs were dependent on a variety of factors, including, space, availability of a NP, funding, time and knowledge around GMVs. GMVs and NPs are being implemented in primary care, yet there remains challenges including: funding, knowledge of how to deliver and the benefits GMVs. This study provides a better understanding of GMVs and the unique or complimentary role of NPs through an exploration of the intersection of these 2 innovations.

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36 The Journey towards Benchmarking in Long-Term Care (LTC) Public Reporting**BERNADEE KOH-BILODEAU**, Project Lead, Performance Monitoring and Reporting, Health Quality Ontario

This poster will illustrate describe how our organization developed and launched benchmarks for indicators it publicly reports in the long-term care (LTC) sector. We discuss how the benchmark selection framework was developed with an LTC expert advisory group and engaged stakeholders before, during and after the launch. Working with the Ontario Ministry of Health and Long-Term Care and other key partners, benchmarking was identified as a tool to support quality improvement. In order to support quality improvement, the established benchmarks should be evidence-based, agreeable to major stakeholders, catalysts for quality improvement and indicative of high quality care. To this end, a modified Delphi process with an expert panel, composed of LTC home operators, clinicians and researchers, was employed to establish the benchmarks. This process involved a literature review of existing benchmarks, analysis of Ontario and Canadian data and two surveys completed by the expert panel. Distributions of indicator results in Ontario and other Canadian regions were used to provide context for selecting values that are recognized as aspirational but also felt to be achievable. Benchmarks for nine risk-adjusted indicators were selected. In many instances, the 90th percentile performance was used as a starting point in discussions about what the benchmark should be. In April 2013, webinars were held with the sector presenting the aspirational benchmarks. The webinars emphasized integration of these stretch targets in quality improvement plans. Resources were also provided to aid homes to utilize data to set their own targets. In November 2013, these benchmark values were reported alongside indicator results at the individual LTC home level. The collaborative process and evidence were key in this journey to develop benchmarks and publicly report this alongside data for LTC homes. Taken together, benchmarks, quality improvement resources and public reporting represent some levers that can support LTC homes in improving quality of care.

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13 The use of volunteers, technology, and interprofessional team to keep older adults healthy at home: Initial findings from the TAPESTRY Pilot Study**LISA DOLOVICH**, Research Director, McMaster University

TAPESTRY is a community based primary health care program aimed at keeping older adults healthy at home. The 16-week TAPESTRY pilot study is exploring the effectiveness of patient and volunteer recruitment and data collection approaches to understand feasibility, acceptance, utility and outcomes measurement. This study employs developmental evaluation techniques using a sequential explanatory mixed methods approach. Developmental evaluation is particularly useful for pre-formative development of potentially scalable interventions. The intervention components are: volunteers, system navigation, technology, and interprofessional healthcare teams. Quantitative approaches includes descriptive analyses and chart audits of the electronic health records. As well, interviews and focus groups with patient and family participants, health care team providers, community organizations and associated trained primary healthcare volunteers will take place at weeks 8 and 16 of the pilot study. Data will be integrated at the data interpretation phase. Twenty-one people responded to the volunteer opportunity, 15 were interviewed, and 12 completed 3 days of training including a formative objective structured clinical evaluation (OSCE). Eighty patients were approached and 31 agreed to participate. Eleven patients are enrolled in the first pilot phase. Ten patients have had 1 visit, and 2 have had 2 visits from volunteer pairs. Data has been collected about: health goals and priorities (10/11 patients), Edmonton Frail Scale (6/11), Duke Index of Social Support (4/11), Nutrition Screen (4/11), and general health (10/11). Key alerts generated from volunteer visits were transmitted to the healthcare team about previous falls and concerns about mood. All patients want training to use their personal health record. Novice volunteers appreciated feedback and guidance from more experienced volunteers. Results suggest that it is feasible to have trained pairs of primary care volunteers visit patients in their homes and electronically collect and transfer information back to the healthcare team. Initial feedback suggest that TAPESTRY is perceived to be a positive experience for both volunteers and patients.

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34 Time Series Methods Applied in Drug Utilization Research: A Systematic Review**RACQUEL JANDOC**, MSc Student, Leslie Dan Faculty of Pharmacy, University of Toronto

Interrupted time series analysis is a quasi-experimental approach often used to estimate the effects of healthcare interventions. We sought to systematically examine the use and reporting of interrupted time series methods in drug utilization research. We completed a systematic literature search to identify all English-language articles employing interrupted time series methods in drug utilization research. We conducted a keyword search using MEDLINE, a citation search using Web of Science, and a reference search of all eligible articles identified. Studies that examined the impact of government/media advisories, new evidence (guideline changes, major publications), or formulary changes on drug utilization were eligible. We tabulated the number of publications by year and type (empirical application, methodological contribution, or review) and summarized methodological details used in empirical applications. Descriptive statistics were used to report findings. We identified 170 eligible articles: 149 empirical applications, 14 methodological contributions, and 7 reviews. Few (11%) articles were published before the year 2000. After 2000, the frequency of papers grew to a high of 26 articles (24 empirical) published in 2012. Most empirical applications examined the impact of formulary changes (56%), 24% examined government/media advisories, and 22% examined new evidence in the form of guideline updates (6%) or major publications (15%). Segmented regression (60%), linear regression (17%), and autoregressive integrated moving average (ARIMA) models (16%) were the most commonly applied time series methods. Testing for autocorrelation was reported in 67% of all studies, 33% reported adjusting for seasonality, and 13% tested for non-stationarity. Few studies reported forecasting (32%) or used a comparison group (32%). Use of interrupted time series methods in drug utilization research has rapidly increased since 2000. Despite recommendations to account for autocorrelation, seasonality, and non-stationarity, few studies report these considerations. Developing standards of practice for time series methods may improve its use and reporting when assessing intervention impacts on drug utilization.

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40 Translation and pilot testing of the Spanish Version of the Cardiac Rehabilitation Barriers Scale (CRBS)**NICKAN MOTAMEDI**, B.Sc. Kinesiology & Health Science 2015 Candidate, York University

Despite its well-established benefits, cardiac rehabilitation (CR) is greatly underutilized. Barriers have been identified through the Cardiac Rehabilitation Barriers Scale (CRBS), which assesses patient, provider and health system-level barriers. The aim of this study was to translate, cross-culturally adapt and pilot-test a Spanish version of the CRBS. This was a cross-sectional study. The 21-item CRBS was professionally-translated, and back-translated into English. It was administered via paper-and-pencil in a convenience sample of percutaneous coronary intervention inpatients in Miami, Florida. Participants were asked how much they agree with each barrier, in terms of enrolling in the program or adherence to all of the CR sessions. Response options were on a 5-point Likert scale from 'strongly disagree' to 'strongly agree'. Overall mean scores were computed and compared by language and ethnicity, with higher scores indicating greater barriers. The internal consistency was assessed using Cronbach's alpha. Sixty-two patients consented to participate (24% women; 40% 61-70 years old; 66% married; 48% identified themselves as 'white' and 38% as 'white Hispanic'; 45% highest educational attainment of college; 47% retired; and 39% with Medicare/Medicaid insurance); of which 13 (21.0%) chose to complete the survey in Spanish. The mean CRBS was 2.22 ± 0.81 , and this did not differ by language ($t=3D.87$, $p=3D.39$) or ethnicity ($F=3D.42$, $p=3D.80$). Cronbach's alpha was 0.94 for the English version, and 0.90 for Spanish. The greatest barriers identified were 'I don't need CR' (2.60 ± 1.3), 'I already exercise at home or in my community' (2.59 ± 1.6), and 'My doctor didn't feel it was necessary' (2.52 ± 1.34). The least-endorsed barriers included 'I prefer to take care of my health alone' and 'transportation'. Initial findings suggest the Spanish version of the CRBS is internally reliable and has face validity. Future research is needed to ascertain the psychometric parameters of the scale in a larger sample. Patients and their physicians require education about the importance of CR, and the comprehensive nature of services offered.

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24 Using interprofessional collaboration to empower patients within community based mental health settings**MAY HELFAWI**, Masters Candidate, Health Sciences, University of Ontario Institute of Technology

Collaborative mental health care is seen as key to enhancing the services provided to mental health patients. However challenges exist. We examine the patient-centred experience, patient's contribution to their care, and how the dynamic of patient involvement works with respect to interprofessional care at a community based mental health setting. Data collection included contextual observations, a paper-based questionnaire, and interviews with 10 mental health patients and 10 health/social care providers in a community based health program situated in an Ontario community hospital. Observational data was collected during 16 weekly interdisciplinary rounds at the mental health clinic. The purpose of the observations was to gain a better understanding of the collaborative process and inform the selection of health/social providers for the interviews. The questionnaire included items to determine views on interprofessional care (IPC) and patient involvement and was distributed to providers working in the community based mental health setting. Results from providers and patients' interviews indicate that providers need to place the patient at the centre of care, and make the patient aware of the alternatives of care available post discharge. Patient involvement is limited by age, mental health condition, and the context of the health care setting. There is a 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 also causes delays in patient discharge plans, increase patient wait times, and a shortage of beds in the unit. All of which are recurring issues discussed during IPC rounds. Physicians were not always present during IPC rounds, and group dynamics varied based on who led the discussions. Shared decision making is a fundamental aspect of patient centred care. Shared decision-making includes the patient and all of the providers responsible for the care of the patient. Patients are empowered by their involvement in IPC and feel better equipped to access and use community based services.

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25 Using stakeholder-informed research to influence system change: Findings from a national initiative to enhance cross-sectoral collaboration and improve pathways to care for youth**JOANNA HENDERSON**, Clinician Scientist, Centre for Addiction and Mental Health

In response to stakeholder-identified needs, this initiative supported development of cross-sectoral networks in 16 Canadian communities to implement a common screening tool, learn about youth substance use and mental health needs across sectors, enhance service provider capacity to address these needs, and engage stakeholders in interpreting findings and making recommendations. Cross-sectoral stakeholders from 16 participating communities across Canada were supported to build networks of youth-serving agencies, engage in joint capacity building, and implement an evidence-supported practice (screening youth aged 12-24 years for mental health and substance use problems) across their services. Core project elements were standardized and adherence was monitored. Other elements were open to local stakeholder adaptation to promote uptake. Uptake and aspects of practice change were measured over time. Small groups of stakeholders participated in joint data analyses and report generation. Larger groups of stakeholders, including youth and families, responded to findings, provided context and generated recommendations. Over 800 stakeholders, including service providers, agency managers, policy makers, youth and family members participated in cross-sectoral networks, capacity-building activities, joint data analysis sessions, and sessions to interpret findings and make recommendations. In response to screening data about the mental health and substance use needs of over 2000 youth across Canada, a number of system change recommendations were made by stakeholders. These recommendations include the continued use of screening for mental health and substance use needs amongst youth, the development and implementation of gender-informed and gender-specific services, the implementation of developmentally-informed and developmentally-specific services, enhanced services to address suicide and trauma, enhanced services to promote health and well-being, increased youth-targeted awareness campaigns about services, and continued efforts to build cross-sectoral collaboration and coordination. Stakeholder-informed research, while having challenges, has many benefits and is feasible. Using a range of strategies to promote stakeholder engagement seems to be an important facet of conducting stakeholder-informed research. Many stakeholders welcome the opportunity to participate and projects benefit greatly from their participation.

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50 What we want versus what we expect: examining variations in guideline-consistent dementia care, a population-based study

SASKIA SIVANANTHAN, Doctoral Candidate, UBC Centre for Health Services & Policy Research

Despite evidence that adherence to guidelines on dementia care can improve quality and outcomes, reports of poor detection and inadequate management persist. Our objective was to assess variations in the utilization of guideline-consistent dementia care processes by individuals newly diagnosed with dementia. We employed a population-based cohort design of British Columbia's community-dwelling seniors (69 years +), following individual-level physician payments, hospitalizations, registry and pharmanet data for fiscal year 2009/10. We used ICD-9/10 codes to identify patients newly diagnosed with dementia and BC Dementia Care guidelines to measure the following dementia care processes: laboratory blood work, imaging, pharmaceutical intervention, complete examination, counseling and specialist referral. Characteristics of the patient cohort and dementia care processes were then described using counts and percentages. Multivariate logistic regression analysis was used to assess the association between receiving each dementia care process and patient demographic predictor variables. There is a decreasing gradient in receipt of guideline-consistent dementia care processes with age. We also find a pattern of inequality particularly for management care processes, in which seniors newly diagnosed with dementia in higher income categories had significantly higher odds of receiving individual counseling and referrals compared to those of lower income. Despite cautions, over a quarter of the dementia cohort receives an antipsychotic (28%) or non-recommended benzodiazepine (26%). Variations in antipsychotic use is shaped by income and geography, where individuals in low-income categories and living within health authorities with smaller urban centres are more likely to receive antipsychotic treatment. A similar geographic trend is seen with variation in benzodiazepine use. We observe significant variations in the proportions of individuals who receive guideline-consistent dementia care with patterns of inequality by age and income unrelated to patient need for service or preference. In particular, we observe income and geographical patterns of antipsychotic and benzodiazepine use that are indicative of their use as substitutions for other forms of care. These observations are troubling and raise questions around the equity of dementia care provision in BC.

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11 What's 'Emergency' Got to Do with It? Reconsidering and Redefining the Role of Emergency Medical Services in the Health Care System

DEIRDRE DEJEAN, Postdoctoral Fellow, McMaster University

The traditional role of emergency medical services (EMS) involves 'out-of-hospital, acute health care provided by paramedics responding in ambulances, and transporting to emergency departments'. In practice, paramedics serve many other non-emergency functions. This qualitative study explores how the media portray EMS and how paramedics perceive their current and future roles. We present a constructivist grounded theory, drawing from interviews with Ontario paramedics and portrayals of EMS in Canadian media as data sources. Paramedics from two Ontario EMS services (n=19) were interviewed between March 2011 and June 2012. We retrieved English-language media reports containing the textwords 'paramedic', 'ambulance' or 'EMS' published from 2007 to 2013. We used theoretical sampling to narrow the set to 1,144 media reports that addressed issues relating to the role of paramedics. Interview transcripts and media reports were manually coded for significant or frequent themes. We then examined and synthesized the relationships between themes. Findings reveal that the role of EMS has evolved formally and informally from the traditional role, in large part because of a need to 'fill the gaps' in health care and social services. Changes have emerged relating to the care paramedics can provide and others expect them to provide. Our study revealed broad interest among Ontario paramedics and from stakeholders in exploring formal changes and expansions to the EMS system that might better fit the needs of the population, such as care for non-emergency conditions or transportation to non-hospital destinations. Multiple EMS initiatives have been reported across the country, but these pilot projects have in some ways increased the ambiguity surrounding the role of EMS in the health care system. EMS remains in its infancy relative to many health professions, and continuously evolves to find its place within the health care system. EMS systems across Canada are currently strained, and clearer policy directions are needed to ensure that the inevitable changes that arise address the desired function of EMS.

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Poster Presentations – Day 2

Présentations d'affiches – Jour 2

39 A picture of magnetic resonance imaging appropriateness in Canada: a literature review

JUAN-NICOLÁS PEÑA-SÁNCHEZ, PhD Candidate, University of Saskatchewan

Technological advancements have led to increases in medical imaging (MI) exam demand and, consequently, concerns regarding appropriateness, particularly for magnetic resonance (MR) imaging. Inappropriate MR exam proportions are often based on studies from other countries with different healthcare systems, hence we sought to compare and summarize Canadian MR appropriateness studies. We completed a systematic literature search identifying studies of MI appropriateness in Canada published between 2003 and 2013. Two researchers independently searched the literature available in the following databases: EMBASE, PubMed, Medline, and Google Scholar. The main search terms were: 'Appropriateness', 'MRI', 'MI', 'diagnostic imaging', 'inappropriate', 'medical audit', 'guidelines criteria', and 'Canada'. Based on titles and abstracts, articles which studied or discussed MR appropriateness were selected. Non-MR related articles and articles from other countries were excluded. MR appropriateness guidelines were also excluded. The remaining articles were reviewed and their results and discussions were summarized and contrasted. In total, 31 studies were found: 13 guideline documents (excluded), 8 reviews/commentaries, 2 qualitative studies and 8 quantitative studies. The quantitative research studies reported inappropriate exam proportions ranging from 2% to 10.9%, with the majority based on small-scale studies. Furthermore, our review also revealed substantial variations among study methods and analyses. The discussions contained in the remaining 10 selected articles revealed three common themes: 1) inappropriate exams yield several undesirable consequences; 2) the need to determine why inappropriate exams are being performed and to seek improvements; 3) appropriateness guidelines are available but are not commonly used. The findings of the available studies do not support the commonly quoted claim that 30% of MI exams in Canada are inappropriate to be true in MR. Rather, they indicate that the true proportion has not been established conclusively in Canada; further research is needed to guide healthcare policies.

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40 Adverse Drug Reaction-Related Hospitalizations Among Seniors, 2006 to 2011

JEFF PROULX, Program Lead, CIHI

Adverse drug reactions (ADRs) are defined by the WHO as adverse effects of a drug that was properly administered in the correct dose, for therapeutic or prophylactic use. This analysis examines the prevalence of ADR-related hospitalizations and the types of reactions most commonly associated with these hospitalizations among seniors. This analysis used data from the Discharge Abstract Database and Hospital Morbidity Database from all Canadian provinces. Hospitalizations due to ADRs were identified using ICD-10 diagnosis and external cause codes. Abstracts were selected if they contained: 1. A most responsible diagnosis code that was either drug-related or due to a drug, provided that the most responsible diagnosis was not indicated to have occurred post-admission; or 2. A pre-admission comorbidity that was either drug-related or due to a drug; or 3. An external cause code that was drug-related. In 2010-2011, 1 in 200 Canadian seniors were identified as having an ADR-related hospitalization (five times more than non-seniors). Anticoagulants were the drug class most commonly associated with ADR-related hospitalizations. The most common diagnosis associated with anticoagulants was bleeding. Other drugs commonly associated with ADR-related hospitalizations were antineoplastic drugs and opioids and related analgesics. The most common diagnosis associated with ADR-related hospitalizations due to antineoplastic drugs was neutropenia, while the most common diagnosis associated with opioid-related hospitalizations was constipation. Many of the commonly observed ADRs were well known reactions. Although it is not always possible to prevent ADRs from occurring, patient monitoring and education are important to ensure that ADRs can be identified quickly so that harm to the patient, and in turn the likelihood of hospitalization, is minimized.

Co-Author(s): Jordan Hunt, CIHI

24 Adverse Events Associated With The Use of Intensity Modulated Radiation Therapy in Breast Cancer Patients Undergoing Adjuvant Radiation Therapy: A Systematic Review and Meta-Analysis

KATHERINE JENSEN, MSc Candidate, University of Calgary

The study objective was to conduct a systematic review and meta-analysis of the current literature to establish the efficacy and safety of Intensity Modulated Radiation Therapy (IMRT) compared to standard tangential radiation therapy (Tan RT) for the treatment of adjuvant breast cancer. A systematic review and meta-analysis was completed using STATA and a random effects model. Inclusion criteria stipulated post-operative adult (? 18 years old) breast cancer patients (Stage I-IV) undergoing adjuvant radiation therapy. Randomized controlled trials (RCTs), quasi-experimental studies and cohort studies were selected. Twenty-three abstracts proceeded to full-text review (two reviewers), 13 were excluded due to: wrong comparator, failed to report adverse events, no original data, non-standard IMRT dose regime and data did not report radiation therapy. For studies reporting results amenable to meta-analyses, data concerning the type and frequency of adverse events and breast cancer-related outcomes, was also extracted. Ten articles were included in the final analysis (Kappa = 0.74, 95% CI 0.40-1.00): 2 randomized control trials (RCT's), 7 comparative cohort studies, 3 designed as prospective cohort studies and 4 as retrospective cohort studies. A total of 17 adverse events were reported among the included studies (from 9 study populations). Moist desquamation was observed in both of the included RCTs and one cohort study. Overall, the pooled analyses revealed potential protective associations between adjuvant IMRT and two acute adverse events: dermatitis and moist desquamation. The remaining pooled estimates, on the other hand, suggested that the odds of developing edema, hyperpigmentation, fat necrosis, pain, induration and telangiectasia were no worse, nor better among those treated with IMRT compared to those treated with standard TanRT. Potential benefits of implementing IMRT as an adjuvant treatment for breast cancer in Canada lies in the goal of further reducing the toxic effects produced by external beam radiation therapy. Ongoing research efforts are needed to further understand the benefits that IMRT brings to the treatment of breast cancer in women.

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10 Approaches to Accountability: The Role of Ontario Laboratory Accreditation

LAVERN BOURNE, MHSc, MLT, UOIT

The lack of regulatory controls and quality management systems may jeopardize the delivery of quality medical laboratory services across Canada. Greater accountability within this sector is a high priority and desirable. The goal of this study was to identify the approaches to accountability in the Ontario medical laboratory sector. A case study design based on a mix methods approach incorporating quantitative (i.e., scoping review of documents) and qualitative data (i.e., 20 semi-structured interviews) was used to document and examine the approaches to accountability in this sector. Key stakeholders in the ML sector including physicians, medical technologists, laboratory managers, laboratory owners and representatives from professional organizations were interviewed to determine their views on the advantages and challenges of the possible approaches, including the role of the Quality Management Program-Laboratory Services (QMP-LS) operated by the Ontario Medical Association. Regulation is the main approach to accountability in the ML sector. Accreditation and licensing is mandatory for all laboratories except those found in physicians' offices. The QMP-LS is a mandatory program responsible for external quality assessment (EQA) and Ontario laboratory accreditation (OLA). The EQA division is responsible for performing proficiency testing that evaluates the medical laboratory based on analytical criteria. The OLA processes of continue quality management 'assesses the ability of a laboratory to perform the scope of tests for which it is licensed' and 'provides formal recognition of this competence through accreditation.' Stakeholders view OLA as an essential component ensuring the delivery of quality services. Challenges exist implementing OLA processes in the pre/post analytical phases when interfacing with healthcare workers outside of the laboratory. Mechanisms to enhance accountability in the pre/post analytical phases are needed. The importance of this is further highlighted by the advancement of point of care testing at the bedside, the pharmacy and at home, which is not currently fully captured by the accountability mechanisms currently in place.

43 Attributable health care costs of diabetes in Ontario, Canada**LAURA ROSELLA**, Scientist, Public Health Ontario

Despite becoming a government priority, diabetes prevalence continues to rise in Canada. Up-to-date estimates of diabetes attributable costs are necessary to inform the health system burden and the economic evaluation of future diabetes prevention initiatives. Therefore, our objective is to estimate the current attributable costs of diabetes in Ontario, Canada. We used a propensity matched cohort design to estimate attributable costs among adult incident cases of diabetes identified in the Ontario Diabetes Database from April 1, 2004 - March 31, 2011. We hard matched cases to controls 1:3 on the index date, age, and the logit of the propensity score (age, rurality (RIO), baseline comorbidity (CADGs), LHIN, and neighbourhood income quintile). We captured all sectors of direct health care costs using health administrative databases. Costs were analyzed by sex and results are presented as mean \pm standard deviation of annualized or total costs for cases and controls and the attributable difference. Costs were analyzed for males and females separately. Cases and controls were evenly balanced on all matching variables (all standardized differences < 0.05). In total 331,243 diabetes cases were matched to 993,729 controls with an average age of 59. Over 8 years of follow-up total costs were \$26,451 \pm \$55,229 among cases and \$19,414 \pm \$45,556 among controls (difference =3D \$7,037). In the index year, incident cases cost \$8,160 \pm \$22,216 while controls cost \$4,374 \pm \$12, a difference of \$3785. Annual costs were on average \$5,187 among cases and \$4,224 among controls, for an average attributable cost of \$963. Among individuals who died, total costs were \$5,057 more among cases than controls while among individuals who survived follow-up, total costs were \$5,914 more. This cohort represents one of the largest, population-based estimates of diabetes costs available, which can be used to inform policies related to prevention and health system management for diabetes. We found that diabetes results in a large economic burden. Prevention strategies are necessary to mitigate this large health cost burden.

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28 Blood Glucose Test Strips: Utilization and Economic Implications of Restrictions in Use in British Columbia**JILLIAN KRATZER**, Research Coordinator, UBC Centre for Health Services and Policy Research

In 2012, British Columbia spent \$22.6 million on self-monitoring blood glucose (SMBG). There is significant evidence that testing for many patients is unnecessary. Therefore, we examined potential policy options for reducing public expenditures on SMBG test strips. We conducted a retrospective study of BC PharmaNet data between 2004 and 2012. To be eligible for the study, patients had to have at least one claim for a SMBG test strip in the study period. We analyzed trends in test strip use and cost, and modeled the potential impacts of quantity limits based on CADTH and CDA recommendations. We also modeled the potential impact of negotiated price reductions. The annual cost of SMBG test strips paid for by PharmaCare increased by 22% between 2004 and 2012, from \$18.4 million to \$22.6 million. The potential cost reduction from quantity limits based on 2012 utilization ranged from \$4.4 million to \$11.6 million. The impact of a 15% price reduction on 2012 expenditures ranged from \$3.4 million savings with no quantity limits, \$7.1 million in savings if implemented in conjunction with modest quantity limits, to \$13.4 million in savings if implemented in conjunction with more stringent quantity limits. Implementing quantity limits will lead to significant savings for British Columbians. Combining quantity limits and price reductions could lead to even greater savings, with some scenarios estimating more than \$4.6 million in annual cost reductions for diabetes test strips over the next 5 years.

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41 Capacity Building in Primary Care: Evaluation of a Low Back Pain Education Program**JESS ROGERS**, Centre for Effective Practice

To evaluate the impact of the education intervention offered as part of the provincial Low Back Pain Strategy on practice behaviors of primary care providers. An evaluation framework was developed to measure impact of the education intervention on practice behaviors. Eight half-day in-person education sessions were offered to primary care providers across Ontario. Survey questions were developed to measure indicators of behavior change and the survey was administered to all participants. The curriculum was subsequently adapted for an online platform, in order to launch an online program in English and French with similar indicators of behavior change being measured pre/post for all participants. Indicators of behavior change collected include: perceived clinician skill comfort and confidence, rationale for common referrals and case-based clinical decision-making. 202 primary care providers participated in the in-person education sessions across 4 cities as well as via videoconferencing technology. 129 participants completed the pre-session survey and 80 completed the post-session survey. A number of indicators showed a change in the direction of evidence-based care when pre and post data were compared. Some differences were seen between family physicians and nurse practitioners. Pre-survey data showed that 47% of respondents indicated they were 'comfortable in determining criteria for evidence-based imaging' as compared to 79% of post-survey respondents ($p < 0.05$). Over 1,500 participants accessed the online program within the first 3 months of launching. Similar trends were seen in participant responses to the online program pre & post evaluation surveys. Assuming that providers self-reported comfort level is an indicator of behavior change, this significant change would be associated with improved appropriate diagnostic imaging and health care system cost savings.

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42 Clinical characteristics and preventable acute care spending among a high cost inpatient population**PAUL RONKSLEY**, PhD, Postdoctoral Fellow, Ottawa Hospital Research Institute

A small proportion of patients account for the majority of health care spending. The objectives of this study were to explore the clinical characteristics, patterns of health care use, and the proportion of acute care spending deemed potentially preventable among high cost inpatients within a Canadian acute-care hospital. We identified all individuals within the Ottawa Hospital with one or more inpatient hospitalization between April 1, 2010 and March 31, 2011. Clinical characteristics and frequency of hospital encounters were captured in the information systems of the Ottawa Hospital Data Warehouse. Direct inpatient costs for each encounter were summed using case costing information and high cost patients were defined as those in the upper fifth percentile of the cumulative direct cost distribution. The Canadian Institute for Health Information ambulatory care sensitive condition (ACSC) indicator algorithm was used to identify potentially preventable hospitalizations among high and low cost patients. During the study period, 36892 patients had 44066 hospitalizations. High cost patients ($n=1844$) accounted for 38% of total inpatient spending (\$122 million) and were older, more likely to be male, and had higher levels of co-morbidity compared to low cost patients. In over half of the high cost cohort (54%), costs were accumulated from a single hospitalization. These events were often emergency or urgent admissions with the most frequent most responsible diagnoses being acute respiratory failure, sepsis, or low birth-weight delivery. High cost patients were also more likely to have an encounter deemed to be ambulatory care sensitive compared to low cost inpatients (6.0% versus 2.8%). Chronic obstructive pulmonary disease, congestive heart failure, and diabetes were the most common ACSC among high cost patients. Within a population of high cost inpatients, only a small percentage of costs appear to be related to preventable hospital encounters. While improving care and mitigating costs remain paramount, these results suggest the ability to lower costs for these patients through better outpatient care may be limited.

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33 Cost-Effectiveness of a Nurse Practitioner-Family Physician Model of Care in a Nursing Home**KAREN MACDONALD**, MPH, University of Calgary

Nurse practitioners (NPs) have been integrated in various settings towards improving healthcare outcomes (e.g., realized access, quality). As aging populations worldwide have increased the demand for long-term care, we explored the implementation and cost-effectiveness of an NP-family physician (FP) model of care in a nursing home in Nova Scotia, Canada. Using a controlled before-after study design, including internal and external control groups, we collected healthcare resource use, including emergency department (ED) transfers, to inform a cost-effectiveness analysis of an NP-FP model of care compared to an FP-only model in a nursing home. We calculated incremental cost-effectiveness ratios (ICERs) comparing the intervention to internal, external, and combined internal and external control groups, measured as the change in healthcare costs for nursing home residents divided by the change in the rate of ED transfers. We assessed uncertainty around the joint distribution of costs and effects using non-parametric bootstrapping and cost-effectiveness acceptability curves. We obtained longitudinal data for 180 residents (intervention: n=45; internal control: n=65; external control: n=70). Point estimates of the ICER demonstrate the NP-FP model was cost-saving, meaning it was associated with a smaller increase in both costs and ED transfers per person-month compared to the internal and combined control groups, but not for the external control group comparison, where a larger increase in ED transfers was observed. Using a willingness-to-pay threshold (based on the estimated cost of an ED transfer) of \$1000 CAD per ED transfer, the probability that the intervention was cost-effective compared to the internal, external, and combined internal and external control groups was 26%, 21%, and 25%, respectively. Point estimates suggested the NP-FP model was cost-saving; however, due to uncertainty around the joint distribution of costs and effects, we were unable to make a definitive conclusion. Future research requires a larger sample size, longer follow-up time, or superior study design to determine the cost-effectiveness of this intervention.

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16 Current computerized prescriber order entries (CPOEs) do facilitate medication errors**TEWODROS EGUALE**, Postdoctoral fellow, Harvard/ McGill

Computerized Prescriber Order Entry (CPOE) has been demonstrated to prevent medication errors. However, there is increasing evidence that CPOE can also introduce new errors. We sought to evaluate how vulnerable 16 leading Canadian and US CPOEs systems are to actual, recurrent medication errors. We selected sixteen (11 US and 5 Canadian) CPOE systems for evaluation and had typical users (medical residents and primary care attending physicians) enter erroneous orders for test patients. These erroneous orders included wrong medication units, overdoses, prescribing a drug for which the patient is known to be allergic, omission errors (omitted dose or directive), wrong dose for indication, wrong frequency, look-alike-sound-alike (LASA) mix-ups and drug-drug and drug-disease contraindications. Outcomes included whether orders were successfully entered, the difficulty of entering orders (easy to impossible) using operationalized definitions and whether relevant warnings were generated during the process. Overall, 79.5% erroneous orders were able to be entered for test patients including 27.2% being 'easily' placed, another 25.9% placed with 'minor workarounds' and 19.2% were prevented from being placed. Moreover, only 29.2% of orders generated specific warnings related to the erroneous order. The CPOEs performed worst in drug-disease interaction error, where 87.5% of pioglitazone orders were successfully placed for congestive heart failure patients. The CPOEs performed poorly in detection of LASA errors (penicillamine vs. penicillin), and wrong dose for the indication (Methotrexate 15 mg PO daily for rheumatoid arthritis). The CPOEs performed better in averting of too high doses, drug-drug interaction, omission of strength of a drug and in allergy situations. In addition, high degree of variability of vulnerability was observed among the systems. Current CPOEs are generally vulnerable in facilitating medication errors. CPOE developers and users need to be aware of this potential for error, and should build strategies to protect patients by improving the safety of CPOE systems, starting with vulnerability testing.

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49 Determinants of Community Pharmacist's Quality of Care: A Cohort Study Using Pharmacist's Billing Data**NANCY WINSLADE**, Assistant Professor, McGill University

Medication non-adherence remains widespread, harmful and costly. Community pharmacists are reimbursed in Quebec to play a key role in improving compliance via the care they provide when dispensing medications. However, little is known about the factors that determine the quality of this care for patients with adherence problems. Previous work has used Quebec's prescription medications and pharmacist's professional services billing data to measure pharmacy-level performance on targeted quality of care indicators. As part of a randomized trial evaluating the impact of performance feedback, the dispensing, patient and pharmacy-level characteristics associated with dispensings of hypertension and asthma rescue medications to noncompliant patients were identified. Dispensings from all non-opting out community pharmacies in Quebec between November 2009 and December 2010 were evaluated. Multivariate alternating logistic regression was used to estimate drug, patient and pharmacy-level predictors of non-adherence with antihypertensive and asthma medications and to account for patient and pharmacy clustering. Over eight months, 11.4% of 9,297,479 antihypertensive and 51% of 791,854 asthma rescue dispensings were provided to non-adherent patients. Non-adherence was less likely with angiotensin-converting-enzyme-inhibitors (OR: 1.21; 95% CI: 1.19, 1.23) and angiotensin-receptor-blockers (OR: 1.21; 95% CI: 1.19, 1.23) relative to diuretics or beta-blockers. Decreased odds of non-adherence for both medication groups were associated with female sex (Anti-hypertensives OR: 1.12; 95% CI: 1.10, 1.14) and prescription durations of >2 months (Anti-hypertensives OR: 1.19; 95% CI: 1.15, 1.23), and increased odds with multiple prescribers (Anti-hypertensives OR: 0.87; 95% CI: 0.84, 0.88) and multiple dispensing pharmacies (Anti-hypertensives OR: 0.90; 95% CI: 0.88, 0.92). Patient age, income and pharmacy-level open-hours, continuity-of-care, busyness and billing-rates for professional services affected odds of adherence differently for the two medication groups. Non-adherence remains a persistent problem more common with specific drugs, prescribing and pharmacy-use patterns, and patients identifiable through community pharmacist's billing data. Further research is needed to determine if consistent pharmacy-level characteristics can be identified that predict the quality of care provided by community pharmacists when managing patients with non-adherence.

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31 Does socioeconomic status moderate the effect of increasing chronic disease burden on three-year survival in a population-based cohort?**NATASHA LANE**, MD/PhD Student, University of Toronto

Lower socioeconomic status (SES) is associated with increased risk of multimorbidity and poorer survival. The direct link between the SES gradient in multimorbidity and survival, however, has not been well described. This study sought to determine whether the effect of increasing multimorbidity on patient survival is moderated by SES. This retrospective cohort study used linked administrative data from April 1, 2009 to March 31, 2012. The study sample consisted of 6,639,089 Ontarians up to age 105 years as of April 1, 2009 with at least one of 16 prevalent chronic conditions. A multivariable proportional hazards regression model was constructed to examine correlates of individuals' survival over a three-year time period. Covariates included the number and type of chronic conditions, as well as sociodemographic and health service utilization characteristics. Interactions between neighbourhood income quintile (SES proxy) and the number of chronic conditions were examined. Preliminary analyses indicate that individuals with higher multimorbidity had significantly poorer survival than those with fewer conditions. After controlling for demographics and health services utilization, higher neighbourhood income quintile was associated with longer survival. However, there was no significant interaction between high disease burden and income quintiles in predicting survival. The number of chronic conditions individuals have is highly predictive of their survival and should be considered when targeting interventions to improve health outcomes in complex patients. Although an SES gradient in survival exists among multimorbid patients, the impact of high disease burden on survival is consistent across SES groups.

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27 Employment Issues among Rural Family Physicians in Canada - 2013 National Physician Survey Results

BILAL KOBEISSI, Research Assistant, College of Family Physicians of Canada

1. To identify the key employment related issues for rural family physicians (FPs) in Canada using the 2013 National Physician Survey (NPS) data; 2. To compare the employment related issues between FPs in rural and urban settings of Canada using 2013 NPS data. The presentation will use data from the 2013 NPS survey for practicing family physicians. The NPS is an ongoing collaborative initiative led by the College of Family Physicians of Canada (CFPC), the Canadian Medical Association (CMA) and the Royal College of Physicians and Surgeons of Canada (Royal College). The online survey was sent to all practising physicians in Canada; all physicians had the opportunity to complete the survey, with voluntary participation. The 2013 NPS had a focus on recent physician employment issues and challenges. Rural FPs were found to be less satisfied with their employment compared to urban FPs (58.6% vs. 61.2%). They felt overworked (38.0% vs. 35.5%), working a mean of 57 hours/week, 6 hours more than urban FPs. Rural FPs provided 156 hours of on-call service hours/month, 57 hours more than urban FPs. 71% of rural FPs were satisfied with their professional life and 47% were satisfied with their personal and professional life balance, both 4% less than urban FPs. One third of rural FPs are planning to reduce weekly work hours (33%) and on-call hours (34%) over the next 2 years. 16% of rural FPs indicated the plan to leave rural practice for urban practice or relocate within Canada in next 2 years. Rural FPs were found to be less satisfied in relation to their employment compared to urban FPs. Key differences between the groups were found to be number of work hours, on call service, and professional satisfaction.

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5 Evaluating the effectiveness of cardiovascular disease prevention and management (CVDPM) approaches: A comparison of two Saskatchewan health regions

CAROLINE BECK, MPP Candidate, Johnson-Shoyama Graduate School of Public Policy, University of Regina

Cardiovascular disease (CVD) programming, independently planned and organized, differs significantly between health regions. Given diverse population health needs, dispersed populations in large geographical areas, and distinct organizational structures, this research compares the current approaches in Regina Qu'Appelle Health Region (RQHR) and Saskatoon Health Regions (SHR) for CVDPM. This comparative case study uses a set of criteria to evaluate regional approaches, in order to consider multiple dimensions of effectiveness, including population health considerations, economic effectiveness, and strategic direction. Thus, evaluative criteria include (1) match with population health needs, (2) accessibility of programs available, (3) integration and coordination of services, (4) budgetary and spending considerations, and (5) predicted outcomes for population health. Regional data is utilized from Statistics Canada CANSIM, CIHI Health Indicators, rural health status reports, budgetary documents, and the grey literature including health region reports. RQHR provides CVDPM through multiple independent programs offered throughout the region's urban and rural areas, though programs are generally limited in population health scope. Comparably advanced programs are arms-length to the Regional Health Authority, relying on annual funding but provided little direction or support. Organizationally, CVDPM programs fall into distinct branches of the management structure, making coordination and integration difficult. Conversely, SHR provides all CVDPM through common branding for chronic disease management, offering programs primarily in Saskatoon and one rural location. Despite a trade-off in accessibility, programs more comprehensively address population health and are delivered highly complementary to one another, creating an integrative approach to CVDPM overall. Structurally, chronic disease management departments are nested closely to one another, better facilitating coordination. Saskatoon Health Region is considered superior to Regina Qu'Appelle Health Region for CVDPM as a result of a comprehensive, streamlined approach, which offers greater potential for economic efficiency while better facilitating planning and management efforts. While challenges remain in both jurisdictions, a number of recommendations and options are implied.

15 Evaluation of Medical Savings Account as an Alternative Healthcare Financing Option, Using a Microsimulation Tool

SAHBA EFTEKHARY, PhD Student, University of Toronto

To use an enhanced version of the Social Policy and Simulation Database and Model (SPSD/M) microsimulation model, currently used to inform tax policy, to model the micro and macro-economic impact of proposed options for financing various healthcare services. This analysis will focus on medical savings accounts (MSAs). By adding health status and healthcare utilization and costs data, an enhanced version of the SPSP/M will be used to test what-if scenarios to compare current policies with the following alternative financing options, as well as different configurations of each option to determine the impact of these options on individuals and the system: 1. Use of an MSA, through government or employers/employee contributions to pay for: a. services currently being paid out-of-pocket b. selected services that are currently covered by public health insurance 2. Paying out-of-pocket for some services that are currently being paid through public health insurance Different scenarios and configurations are being tested through sensitivity analysis at this time and the following is expected from the analysis: Immediate micro and macro-economic impacts of implementing proposed financing options compared to current state will be discussed, including: 1. Who is going to be financially affected? 2. Who are winners and losers in terms of taxation and finances? 3. What are the tax and revenue implications for the health care system? 4. What are the implications for individuals and families of implementing the proposed alternative financing options? 5. What is the optimal scenario in setting up an MSA? Powerful tools, such as the SPSP/M, can facilitate analysis of the economic impact of healthcare financing decisions on individuals and on the healthcare (and taxation) systems, including winners and losers, and how these may vary by type of care and policy option.

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1 Exploring Gender Bias in Heart Failure Patients Treated in Specialized Multi-Disciplinary Ambulatory Clinics of Ontario

LUSINE ABRAHAMIAN, Clinical Epidemiologist, Toronto Health Economics and Technology Assessment (THETA) Collaborative, University of Toronto

To explore gender differences in patient profiles, diagnostic testing, medication prescription and referral patterns in specialized multi-disciplinary ambulatory heart failure clinics of Ontario. Detailed medical chart abstraction was conducted in randomly selected 9 HF clinics in Ontario, enrolling approximately 100 patients randomly selected from each clinic. Data was abstracted on patient demographics, co-morbidities, diagnostic tests, medication use and referrals over a 1-year period from the first clinic visit. Descriptive statistics and adjusted regression analysis were used to assess gender differences. Of the 884 patients, 314 were women (35.5%). At the first clinic visit, women were older, had better systolic function and lower prevalence of hyperlipidemia, diabetes, smoking and past revascularization. There were more women with non-ischemic HF etiology than men (63.9% vs 43.3, $p < 0.001$). Adjusted analysis did not reveal differences in the average number of echocardiographic assessments by gender as well as in the prescription rates of beta blockers and angiotensin converting enzyme inhibitors/angiotensin receptor blockers, during the first year of enrollment. The rates of dietary counseling and cardiac rehabilitation referrals were low in both groups with no significant differences between them. More men than women are referred to HF clinics. Women tend to be older with better systolic function and fewer comorbid conditions at their first visit to HF clinic than men. No major differences were observed in HF practice patterns between genders. Future studies should investigate the reasons of low referral rates of women to HF ambulatory clinics, impact on outcomes and assess the need for development of gender specific treatment protocols.

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13 Funding hospital volume and effect on readmissions: Experience from the trenches**TRAFFORD CRUMP**, UBC Centre for Health Services and Policy Research

British Columbia (BC) fundamentally changed the way it funded acute care in April 2010, partially remunerating hospitals based on the activities they perform. This is commonly referred to as activity-based funding (ABF). This research examines the impact of ABF on readmission rates in the BC healthcare system. We analyzed British Columbia's population of monthly acute hospital summary discharge data from 2008/09 to 2012/13. We used a GEE model to analyze the all-cause readmissions 7 days after hospital discharge; the independent variables include time, facility, health authority, patient-level co-morbidities and an indicator variable representing the implementation of ABF. The readmission rate averaged 18% higher prior to ABF being implemented compared to afterward, but the probability of readmissions 7 days after discharge did not statistically significantly increase after ABF was implemented (p-value =0.34). Higher levels of patient co-morbidity are associated with a higher probability of readmissions, but this was also not statistically significant (p-values >0.05). Using Vancouver Island Health Authority as a reference group, readmissions in Fraser Health are 15% higher (p-value=0.16), Vancouver are 38% lower (p-value < 0.01) and Interior Health are 29% lower (p-value=0.02). Within regional health authorities, readmission rates vary across hospitals, but the differences are not always statistically significant. Changes in readmissions data provide one perspective regarding changes in the quality of care provided to patients in BC. Our analyses indicate that the introduction of ABF in BC was not associated with an increase in hospital readmission rates.

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48 Harmonization of Health Technology Assessment and Regulatory Approval: A Bridge Over the Chasm**BERNICE TSOI**, PhD candidate, PATH Research Institute/ McMaster University

Despite growing medical innovation, the diffusion of health technologies into the healthcare system has often proven problematic. In part, this stems from the separate processes of regulatory and reimbursement evaluation. This mixed-method study identified and assessed known initiatives that aim to better harmonize/align regulatory approval and health-technology assessment (HTA)-based reimbursement. A systematic literature review was conducted to identify empirical cases of HTA-regulatory harmonization, capturing literature up to June 10, 2013. Semi-structured interviews with key international stakeholders from a broad range of perspectives were also conducted to supplement the literature review. The interviews elicited an organization's or individual's experiences with harmonization in terms of evaluating their initiatives and identifying implementation/ operational challenges. A number of cases were identified in Canada and in other jurisdictions internationally. These initiatives included early tri-partite dialogue, alignment of evidence need, pre-market evaluation, parallel licensing and adaptive licensing. Approaches to harmonize can be categorized into those: i) focused on content (i.e. reducing uncertainty in the evidentiary requirements, translating evidence that reconciles regulatory and payer perspective); and/ or, ii) focused on processes (i.e. aligning the timeframes or logistical elements in the review process of better coordinating structural and organizational aspects of HTA and regulatory review). Recurring barriers and facilitators to harmonization fell into the following themes: healthy stakeholder relationships; well-intention; clearly defined governance and leadership; and available organizational infrastructure. Considerable overlap exists between HTA and regulatory approval, and harmonization is both possible and feasible. Greater coordination can benefit all levels of the healthcare system and bring forth the necessary evidence to guide both agencies' decision-making needs. However, it may also have several drawbacks that require further investigation.

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2 Health Systems Guidance Appraisal - Better Guidance for Better Health Systems**DENIS AKO-ARREY**, PhD Candidate, McMaster University

Health Systems Guidance (HSG) assists in addressing a health system challenge, but there is a dearth of high quality HSG on policies and interventions that impact HS performance/efficiency. Our goal is to develop a HSG Appraisal Tool (HSG-AT) that will be used to direct the development, reporting, and appraisal of HSG. This study will unfold in 3 stages. Stage 1: Conduct a knowledge synthesis of the literature to generate a candidate list of items for the HSG-AT. A draft list of candidate items will be generated. Stage 2 & 3 will be based on findings of Stage 1 to draft the HSG-AT. We identified 33 papers that met eligibility criteria. No existing appraisal tool (draft or final version) was identified. Over one third of the authors explicitly identified the need for a high quality tool aimed to systematically evaluate HSG and contribute to its development/reporting. Thirty-two concepts were identified that may be relevant to the appraisal of HSG: problem definition, coverage, stakeholder involvement, evidence-based, operationalization, feasibility of implementation, ethical, politically sound, socio-culturally acceptable, prioritization, relevance, clarity of recommendations, transparency, flexibility, outcome indicators, resources, cost, affordability, effectiveness, cost-effectiveness, external factors, presentation, dissemination/reporting plan, updating, benefits/harm, process evaluation, impact evaluation, generalizability, sustainability, competing interests. Objectively discriminating between good and poor guidance is an arduous task since HSG quality can be regarded upon as an inherently subjective assessment that depends on a variety of health system factors and articulates with the local institutional, interests and ideologies in place.

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36 Healthcare costs attributable to a secondary diagnosis of Clostridium difficile: A retrospective cohort study using Ontario health administrative data**NATASHA NANWA**, Graduate Student, University of Toronto

To estimate attributable healthcare costs associated with hospital admissions that have a secondary diagnosis of Clostridium difficile (CD) from the Ontario Ministry of Health and Long-Term Care perspective. Incident subjects with a secondary diagnosis of CD were identified by ICD-10-CA code A04.7 (enterocolitis due to CD). The subjects' observation time was organized into disease phases: I) acute infection and II) continuing care. Incident subjects (infected) were matched to uninfected subjects on sex, age, admission date, primary diagnosis, co-morbidities, rurality, institution, income quintile, healthcare and antibiotic exposure using hard and propensity score matching. Phase I length was determined by expert opinion and graphing costs. Phase II length was not determined as it varied among subjects. Total and attributable 30-day costs for each phase were calculated (2012 Canadian dollars). From January 2003 to December 2010, 21,998 subjects (2,750/year) with a mean age of 71.9 years (standard deviation [SD]=3D±17.3, range=3D0-107), and 53% female were identified. Sixty-eight percent died (all cause) during the observation period (January 2003 to December 2011) and 48% died within one year of their admission date. The length of phase I was 6 months. Mean 30-day costs for phase I were \$9,411 (SD=3D±\$9,395, range=3D\$387-\$201,236, median=3D\$6,584) per infected subject versus \$3,825 (SD=3D±\$4,621, range=3D\$30-\$98,365, median=3D\$2,490) per uninfected subject (p<0.0001). Therefore, mean 30-day attributable costs were \$5,586 (SD=3D±\$7,403) for phase I. Mean 30-day costs for phase II were \$2,266 (SD=3D±\$4,543, range=3D\$0-\$137,320, median=3D\$936) per infected subject versus \$705 (SD=3D±\$1,482, range=3D\$0-\$33,483, median=3D\$198) per uninfected subject (p<0.0001). Therefore, mean 30-day attributable costs were \$1,561 (SD=3D±\$3,379) for phase II. A secondary diagnosis of CD significantly increases healthcare costs. These results will be compared to those who have: I) hospital admissions with CD as the primary diagnosis; II) elective surgery with CD as the primary or secondary diagnosis; and III) ER visits with CD as the primary or secondary diagnosis.

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45 High risk screening of seniors in Quebec emergency departments

DENIZ SAHIN, Project Coordinator, St. Mary's Research Centre, McGill University

Emergency department (ED) high risk screening for seniors is an efficient way to target resources, and is a key component of the Senior Friendly Hospital Program being implemented in Quebec. We sought to describe the current status of implementation of high-risk screening in Quebec EDs. We surveyed key informants (heads of ED medical and nursing services) at 116 adult, non-psychiatric Quebec EDs. The survey questionnaire included questions on: use of a high risk screening tool for seniors, the population screened, the specific tool used, when during the visit that screening took place, follow-up of high risk patients (e.g., assessment in the ED, referral to home care services, etc), and use of standardized tools (cognitive, functional, medications) to assess high-risk patients. Other information collected included the decision to implement the Senior Friendly Hospital Program, and perceived quality of ED care of seniors. Responses were received from at least one informant at 80 (69%) of 116 EDs. Overall, 66 (83%) of EDs reported use of a high-risk screening tool for seniors (as compared to 30% in 2006). In EDs that use a high-risk screening tool, follow-up of those found to be high-risk include: ED-based assessments (42%), referral to home-care or inpatient services without ED assessment (30.3%), or neither (27.3%). 50% of EDs that conducted ED based assessments used 2 or more standardized tools. Greater use of high-risk screening tools was found in EDs that had decided to implement the Senior Friendly Hospital Program. Use of a high-risk screening tool was associated with better quality of ED care of seniors, as reported by nurses but not physicians. Introduction of the Senior Friendly Hospital Program has been associated with a large increase in the reported use of high risk screening tools in Quebec EDs. However, ED-based assessment of high-risk patients (needed to assess unmet needs for specific services) is limited, and often does not use standardized assessment tools.

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3 How is diabetes care working for First Nations? Evaluating community wellness programs and informing prevention planning

DHIWYA ATTAWAR, PhD Student, University of Manitoba

The overall study aim was to evaluate wellness programs in a rural, Manitoba First Nation community as a platform for enhancing diabetes care and for identifying diabetes prevention priorities. A key evaluation objective was to assess how community health centre wellness programs were functioning in delivery of diabetes-related services. Program evaluation was identified as a priority by the Community Diabetes Advisory Group. Guided by a Utilization-Focused Evaluation framework, an evaluation plan was developed collaboratively between community health centre program team leads and university research team members. The evaluation was implemented in stages through document review, in-depth individual interviews, and small group meetings. Participants included: health centre program planners; program deliverers with knowledge of diabetes care; community members who use health centre programs; and non-user community members. Results of stage 1 interviews with program planners/deliverers will be shared in this presentation. This research was guided by a community-based participatory framework. Diabetes education was identified as a strength of community wellness programs and was the main focus of diabetes prevention efforts in the community. Despite training and education resources available, capacity to deliver diabetes program activities was limited. Multiple program challenges were encountered in the delivery of diabetes care and prevention services in the community. Health promotion efforts were insufficient to effectively engage community members. Knowledge gaps were reported among both community members and staff revealing different biomedical and Indigenous understandings of diabetes. Development of a community diabetes program was constrained by unstable funding structures. Significant gaps in the continuum of diabetes care resulted including: limited coordination and delivery of primary care in the health centre setting; and few organized, wellness activities in the community. Public health systems are ill equipped to address the current diabetes epidemic in rural First Nation communities. Sustainable diabetes prevention models urgently require greater investments in building primary health care capacity. Recognition of existing community capacity and local knowledge of wellness is essential.

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19 Implementing Frontline Services for Addictions in Quebec: What are the challenges?

KATHRYN GILL, Associate Professor; Research Director, Department of Psychiatry, McGill University; Addictions Unit, McGill University Health Centre

This research explored the implementation of a 2007-2012 government policy mandating frontline addiction services in healthcare centres throughout Quebec. The aim was to identify the facilitators and barriers that organizations faced during this process and develop an increased understanding of the challenges of implementing government policies in frontline health services. In 2013, 45 qualitative interviews were conducted with clinicians and management from 21 health and social service centres (CSSS) throughout Quebec. All 93 provincial CSSS were invited to participate, of those who expressed an interest, a regionally representative sample was selected. Purposive sampling was used to recruit participants within the organization who were directly involved with the adoption and implementation of the mandated frontline addiction services. Participants were asked to outline their organization's current practices and services in addictions, their level of implementation of the government policy, and to describe the facilitators and barriers impacting their perceived challenges and successes. Participant interviews revealed several consistent challenges in fulfilling the services outlined in the policy. For the majority of organizations, lack of additional funding for the addictions program development was considered a key barrier to implementing services. Organizations were left to develop their own program and services and thus a variety of implementation models were developed. In many organizations a new position was created for an addictions specialist. The specialist's role and responsibilities varied depending on the organization, and the role itself created both barriers and facilitators to the implementation of services depending on how it was defined. Implementation was greatly facilitated by clinicians and managers who were invested in providing addictions services and by having ongoing collaboration and support from local addiction treatment centres. Healthcare centres in Quebec are making significant efforts to implement frontline services for screening and early intervention in addictions. Some organizations have successfully implemented key objectives from the government policy, while others face ongoing challenges at multiple levels creating considerable variation in frontline addiction services developed throughout the province.

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25 Lack of provincially funded general eye exams affects vision health outcomes

YAPING JIN, MD, PhD, University of Toronto

General/routine eye exams for seniors are not uniformly covered by government health insurance programs in Canada. We aimed to investigate whether the lack of government-funded general eye exams have an effect on vision health outcomes. Based on self-reported survey data collected by Statistics Canada, we conducted a series of individual studies to compare prevalence and incidence of glaucoma and uncorrectable vision loss (i.e. unable to see close or distance with eyeglasses) between Caucasians aged 65 years or over residing in provinces with and without government-insured general eye exams. The exclusion of non-Caucasians was due to the inability to make valid comparisons between different ethnic groups with different eye disease rates. The exclusion of individuals younger than 65 was because of the low eye disease rates and the restricted sample size. The incidence rate (per 1000 person-years) of self-reported glaucoma was higher in government-insured seniors (12.8, 95% confidence interval [CI] 10.5-15.1) than uninsured (8.1, 95% CI 5.5-10.7). The incidence of uncorrectable vision loss was lower in the insured: 22.5 (95% CI 20.0-25.5) versus 26.6 per 1000 person-years (95% CI 20.2-33.0). Adjusting for confounding factors, insured seniors were associated with a 59% increased risk of glaucoma (Incidence rate ratios [IRR] 1.59; 95% CI 1.07-2.37). The mean age at diagnosis of glaucoma was about 2 years older for people with no insurance (68.1 years) versus those with provincial insurance (66.6 years, $p > 0.05$). The poor-rich gap by prevalence of uncorrectable vision loss was widened in the uninsured elderly (2.2%) versus the insured (0.7%, $p > 0.05$). Government-funded general/routine eye exams are associated with a higher incidence and earlier diagnosis of glaucoma, likely due to earlier detection. Insured eye exams are also associated with a lower incidence and a narrower poor-rich gap in uncorrectable vision loss, likely due to better access to eye care and earlier treatment.

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7 Le collectif de recherche : un outil de transfert des connaissances en temps opportun

ROXANE BORGÈS DA SILVA, Professeure, Université de Montréal

Le collectif de recherche est une activité d'application des connaissances qui combine la synthèse, la dissémination et l'échange des connaissances entre chercheurs et décideurs dans le but d'améliorer la connaissance sur un sujet et de renforcer son utilisation par les décideurs. Le collectif de recherche sur : l'organisation des soins de santé primaire (OSSP) au Québec s'est déroulé au cours de l'année 2013 (journée d'échange le 13 juin) et a réuni plus de deux cents chercheurs et décideurs. Une trentaine de chercheurs ont présenté les résultats de leurs travaux en quelques minutes dans l'un des thèmes suivants : 1) Accessibilité, continuité, qualité des soins et recours à l'urgence; 2) Inégalités de santé et santé mentale; 3) Maladies chroniques et cancer; 4) Pratiques professionnelles, formation, participation des patients; et 5) Caractéristiques organisationnelles et réformes. Une synthèse a par la suite été rédigée. Plusieurs messages clés ont émergé des projets présentés dans les 5 thèmes. La qualité, la continuité et l'accessibilité restent des grands défis de l'OSSP au Québec. L'implantation d'incitatifs financiers n'a pas donné toujours les résultats attendus pour améliorer l'OSSP au cours des dernières années. Le recours aux services d'urgence répond à des besoins différents selon le contexte géographique. Les nouveaux modèles d'OSSP ont permis d'améliorer la continuité et la globalité d'une part (GMF) et l'accessibilité d'autre part (cliniques-réseau). La présence d'une infirmière semble en partie expliquer ces résultats positifs. L'OSSP ne répond pas de manière optimale aux besoins des personnes vulnérables et des personnes avec des besoins complexes (multi-morbidités). Pourtant leur prévalence augmente. La mise en place d'équipes multidisciplinaires et la collaboration interprofessionnelle améliorerait l'OSSP. Le collectif de recherche offre un outil de synthèse des connaissances en temps opportun. Grâce aux échanges directs avec les chercheurs, les décideurs peuvent améliorer leur compréhension des résultats des recherches. Ils peuvent également profiter de l'occasion pour exprimer leurs préoccupations et ainsi orienter les recherches futures.

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21 Level of disability, multi-morbidity and breast cancer screening: Does severity matter?

SARA GUILCHER, Post Doctoral Fellow, St. Michael's Hospital, HSPRN

Breast cancer screening is important in the early identification and treatment of breast cancer. Previous research has shown that women with disability are less likely to be screened; however research is limited on the extent to which level of disability and multi-morbidity influence appropriate screening. Thus, we aimed to determine the screening rates for women by level of disability and multi-morbidity and identify the influence of disability, multi-morbidity and sociodemographic variables on screening. Using a retrospective population-based cohort study design, we linked administrative data to identify breast cancer screening in Ontario. The cohort was identified using two waves of the Canadian Community Health Survey (2005 and 2007/08). In total, 10,363 women were identified for study inclusion, 4,660 of whom reported some level of disability. Women with disability were significantly more likely to be older, separated or divorced, have less education, lower income and multi-morbidity compared to women without disability. Women with a moderate level of disability had higher screening rates than both women with no disability or severe disability (71.4% vs. 62.0% and 67.9% respectively). In multivariate regression, women with moderate level of disability had higher odds of being screened compared to women with no disability (OR 1.2 [1.09-1.38]). Similarly, women with one chronic condition had higher odds of screening compared to women with no chronic conditions (OR 1.31 [1.17-1.46]). Our findings suggest that intermediate levels of disability and morbidity are associated with the highest likelihood of breast cancer screening. Future research should focus on the context and mechanisms involved in the entire screening process that explain these findings in order to inform targeted strategic interventions.

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4 Making Sense of eHealth Investments and their Policy Implications in Canada

JESDEEP BASSI, Research analyst, University of Victoria

Over the past decade Canada has invested over a billion dollars in eHealth. Despite the investments made, the results have been mixed. The current literature is similar with conflicting eHealth impacts and clinical benefits reported. This study is being conducted to make sense of the evidence and inform future directions. Three methods will be used: (a) a rapid realist review of existing literature on eHealth and information technology (IT) investments, impacts and benefits in Canada and elsewhere with a focus on why systems worked or not as expected; (b) key informant interviews with selected stakeholders knowledgeable in eHealth across Canada to confirm the literature findings; and (c) organizational sensemaking to explain the findings, suggest future directions and discuss policy implications. Our output will be relevant and meaningful to policy/decision makers involved with eHealth investment decisions. This study will be done by March 2014. The findings will be organized into seven parts. First is a proposed eHealth value framework by which existing evidence can be synthesized and explained, including a roadmap for future directions. Second is a synthesis of the evidence on eHealth benefits in Canada. Third is a comparison of the benefits with those in other countries. Fourth is a comparison with IT investments in other industries. Fifth is placing eHealth within the health system contexts by drawing on emerging trends and selected initiatives where eHealth plays an enabling role. Sixth is a glimpse of promising eHealth-enabled practices in Canada and elsewhere that may serve as benchmarks. Seventh is a summary of enablers and barriers to achieving eHealth benefits. Detailed findings will be presented at the conference. Our eHealth value framework offers an organizing scheme to make sense of eHealth investments, impacts and benefits, and provides future direction guidance. To create clinical and systemic value, we need to provide context-specific eHealth value definitions, identify specific eHealth assets and capabilities, and understand the process to create eHealth value.

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14 Mental health service use by recent immigrants and by long term residents in Ontario, Canada

ANNA DURBIN, MPH, University of Toronto

Little is known about post-immigration use of mental health services by newcomers from varied source countries. This study compared service use for non-psychotic mental disorders for recent immigrants to urban Ontario grouped by region of origin and for long term residents. This population-based cross-sectional study linked health services databases in an anonymous fashion to the Citizenship and Immigration Canada database that contains individual-level demographic information for Ontario's permanent residents who landed from 1985 to 2010. This study assessed access and intensity of use of primary care, psychiatric care and hospital care (emergency department visits or inpatient admissions) for non-psychotic mental disorders from 1993-2012 by adult immigrants (n 2,114) during their first 5 years in Ontario. Immigrants were grouped by world region. Use by each region group was compared to age-matched long term residents using sex-stratified conditional logistic regression and negative binomial models. Compared to long term residents, use of psychiatry and hospital services was generally lower for immigrants from all regions. In contrast, immigrant use of primary care varied depending on source region. Across the three service types, relative positioning of estimates of use among region groups tended to be consistent. Use of services was among the lowest for newcomers from East Asian and Pacific (males: 0.16-0.82; females: 0.18-0.68) and among the highest for persons from Middle East and North Africa (males: 0.65-1.23; females: 0.56-1.02). Rising rates of immigration globally have raised questions about the demands newcomers place on mental health services in host countries. This study showed that recent immigrants had lower use of specialist mental health services than long term residents.

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22 Mental illness and target length of stay after elective joint replacement

JENNIFER HENSEL, Research Fellow, Department of Psychiatry, University Health Network; Department of Psychiatry, University of Toronto

To determine the rate of mental illness among cases electively admitted for hip and knee joint replacement procedures at a large tertiary care network and to examine mental illness as a predictor of failure to meet expected length of stay targets. A secondary data analysis of joint replacement cases in the Discharge Abstract Data obtained from the hospital for the fiscal years between 2006/2007 and 2012/2013. Primary and co-morbid diagnoses were coded according to ICD-10. A mental illness was defined as the presence of a psychotic, mood or anxiety disorder coded in the discharge co-morbidities. Length of stay was coded as within target or not based on the current Ministry of Health targets of 4.4 and 7 days. A binary logistic regression analysis examined the relationship between mental illness and missed target controlling for age, gender, diagnosis and number of other co-morbidities. There were 6953 cases of joint replacement in the selection period. 151 (2.2%) had a documented mental disorder. Cases with mental disorders were more often female and had a higher number of other co-morbidities (mean 4.3 vs 2.4, $t(155.7)=-8.4$, $p<0.001$). Failure to meet both 4.4 and 7 day targets were significantly associated with older age, a diagnosis other than arthritis and a higher number of co-morbidities. Female gender was associated with missing the 4.4 day target only. Controlling for these other variables, having a mental disorder was not associated with failure to meet either target. Although mental health patients may fare worse in short-term recovery from elective joint replacement, it may be explained by a higher number of non-mental health co-morbidities rather than the mental illness itself. This is a small study but raises an important consideration for future work on referral patterns and acute care funding.

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12 Nutrition care needs of Alzheimer disease and non-Alzheimer disease dementia patients

ALLISON CAMMER, University of Saskatchewan

Nutritional status is an important factor in preventing decline in physical health and behavioural symptoms and increased healthcare use in persons with dementia. Our objective was to examine differences in the functional abilities of eating and drinking between persons diagnosed with Alzheimer disease (AD) and non-AD dementia. Data were collected from 301 community-dwelling patients and care partners at the initial diagnostic assessment at a rural/remote memory clinic in Saskatchewan. A total of 201 (66.8%) patients diagnosed with dementia were retained for analysis. The Bristol Activities of Daily Living scale, completed by the care partner, was used to assess functional ability to prepare food, eat, prepare drinks, and drink. Cases were grouped by AD and non-AD dementia diagnosis. Differences in functional ability were tested using multiple logistic regression models adjusted for severity of illness, age, and sex. Odds ratios (ORs) and 95% confidence intervals (95% CIs) are reported. Amongst the study cohort of 201 cases diagnosed with dementia, 43.3% were diagnosed with non-AD dementia. Overall, 26.9% of cases rated poor functional ability to prepare food, 6.0% to eat, and 19.9% to prepare drinks. Patients with non-AD dementia were at increased risk of functional impairment with preparing food (OR 2.35, 95% CI: 1.11-4.98), eating (OR=5.11, 95% CI: 1.11-23.50), and preparing drinks (OR=0.76, 95% CI: 0.31-1.83). Those with non-AD forms of dementia experience increased risk of functional impairment in nutrition-related ADLs and may benefit from early monitoring of intake to prevent nutritional deficit due to impaired abilities. This points to a need for targeted clinical nutrition support and intervention for dementia patients. These findings demonstrate the importance of tailoring clinical interventions according to type of dementia diagnosis. Nutrition support may be required earlier in the disease trajectory by persons with non-AD forms of dementia. Clinical policy and programming should be designed according to differential diagnoses in order to reflect distinct care needs.

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17 Organizational Factors in Integrated Healthcare Delivery Models: A Review of Measurement Tools

JENNA EVANS, Post-Doctoral Fellow, Institute of Health Policy, Management & Evaluation

Mixed performance outcomes across community-based integrated care models may be explained partly by differences in organizational factors. This study identified, organized and assessed quantitative measures to describe and compare organizational structures, capabilities and contexts, and potentially predict the success of integrated care initiatives. A comprehensive conceptual framework of organizational factors was developed - the Context for Integrated Care (CIC) Framework - by drawing from literature reviews and seminal works on innovation implementation, performance improvement, and integrated care delivery. Relevant quantitative instruments were identified using an expert consultation process (n=40) and a literature search. The instruments were mapped to the framework and systematically summarized, compared and assessed by their scientific properties and practical considerations. A further search was conducted to determine the use and empirical base of all identified measurement instruments. The CIC Framework consists of four categories: (1) Organizational Structure and Design (e.g., resources, governance, performance management), (2) Organizational Leadership and Strategy (e.g., leadership style, clinician engagement, strategic focus on improvement), (3) Social/Psychological Context (e.g., climate for teamwork, organizational culture, readiness for change), and (4) Organizational Processes (e.g., teamwork, clinical practices, inter-organizational collaboration). Over 125 quantitative instruments were identified across these diverse constructs, primarily self-administered questionnaires with Likert-type scales. Most instruments focused on teamwork and social/psychological factors, while relatively few focused on structural constructs. Psychometric properties varied with most measures requiring further use and testing, and there was considerable overlap across instruments in some areas. In this presentation we will highlight recommended measurement instruments across the four overarching categories in the CIC Framework. Researchers and practitioners can use this bank of valid, reliable measures to describe and compare a range of organizational factors that are empirically linked to improved organizational performance. We provide standardized tools for data collection and comparison across care providers and settings with particular value for evaluating integrated care initiatives.

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30 Overweight and Obesity: A History of Diet- Results of a Study with Children and Adolescents from a Psychosocial Perspective in Germany

DÖRTHE KRÖMKER, McGill University

Understanding the social and psychological factors that cause youth overweight and obesity is likely to help in developing effective change interventions. The study aims to identify the interplay of broad parent and child related psychosocial factors that are most strongly related to eating behaviors and to the Body Mass Index. Data were obtained from 798 adolescents between 13 and 18 and their parents through a standardized survey in Germany. Participants were recruited from a cluster-randomized sample stratified on school type and geographic location (urban and rural areas). Based on a conceptual model developed on ecological and behavioral health theory a comprehensive path model was built with structural equation analysis. Dependent variable is the BMI-SDS, calculated on self-reported and measured parameters. The model considered eating behavior and specific dietary practices and a broad set of personal beliefs (concerning nutrition and body), situational (e.g. availability of snacks) and contextual (parents' attitudes) factors. 29 % of variation of BMI-SDS could be explained. The strongest direct positive effects on the child BMI came from the child 'restrained dietary behavior', followed by the 'mother's BMI' and 'parents' dieting orientation', direct negative effects came from 'joy in exercising', 'emotional eating', and 'internalization of slim body image'. 32% variation of the child 'restrained dietary behavior' could be explained. It is positively correlated with 'perceived barriers for exercising', but also positively with 'emotional eating' and 'internalization of slim body image', and negatively with 'self-efficacy to eat healthily'. Restrained dietary behavior is a key and mediates emotional and normative variables, which in this process contribute to a higher BMI, but which in their direct effect on the body weight contribute to a lower BMI. Restrained dieting needs to be considered as an ineffective coping strategy that intensifies weight gain. Further, the importance of parents' attitudes and practices on children's BMI is underlined. Interventions are needed that support the whole family to develop more effective strategies to reduce or stabilize weight.

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9 Patient centered care: More than feel-good care**FATIMA BOUHARAOU**, Centre de recherche de l'hôpital St Mary

Patient centered care is a core value in primary healthcare and it consists in seeing and treating the patient as a whole-person rather than a bearer of disease. Our study examines whether patients' assessments of patient centered care are linked to subsequent reports of effective care and patient safety. Patients aged 25 to 75 years were recruited to represent one-week of waiting rooms in 12 clinics in Quebec. 992 responded to three annual self-administered questionnaires eliciting health and healthcare experience at the clinic over the previous 12 months using validated subscales. We created different composite indices. The patient centered care index included interpersonal communication, knowledge of patient, and empowerment. Effectiveness included prevention and health promotion, treatment plan and how to cope between visits. A patient safety index included medical errors and medication risks. We evaluated the effect of patient-centered care at baseline on effectiveness and patient safety after one year. Composite index scores ranged from 0-to-10. The mean effectiveness and patient safety scores are 5.92 (SD=3D1.98) and 8.70(SD=3D1.78) respectively; the mean score of patient centeredness was 7.08 (SD=3D2.08). Patient assessments of patient centered care at baseline are positively correlated with better Effectiveness and patient safety at year 2. In separate linear regressions, patient centered care explains 15% of the variation in effectiveness and each unit increase in patient centeredness increases effective care at year 2 by 0.37 points. It explains 8% of the variance in patient safety, and it increases patient safety by 0.24. We also confirmed previous findings that higher scores in patient centered care are associated with higher assessments of relational continuity. Patient centered care is more than a feel-good dimension of health care; it is related to better preventive coverage, more health promotion, better illness management and safer care. Evidence accumulates that the patient centred approach is not only valued by patients but is also an effective clinical method.

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35 Perceived Facilitators and Barriers to Self-Management in Individuals with Traumatic Spinal Cord Injury: A Qualitative Descriptive Study**SARAH MUNCE**, PhD Candidate, University of Toronto

The purpose of the current study was to understand the perceived facilitators and barriers to self-managing in individuals with traumatic spinal cord injury (SCI). A descriptive qualitative approach was used and involved telephone interviews. Semi-structured interviews were conducted with individuals with traumatic SCI, their family members/caregivers, and managers from acute care/trauma and rehabilitation centres. Participants were recruited between September 2011 and May 2012. Analysis was conducted using inductive thematic analysis to understand the perceived facilitators and barriers to self-managing to prevent secondary complications. A total of 26 interviews were conducted and they included 7 individuals with traumatic SCI, 7 family/caregivers (i.e., 7 SCI-caregiver dyads), and 12 acute care/rehabilitation managers from across the province of Ontario. The following five facilitators to self-management were identified: physical support from the caregiver, emotional support from the caregiver, peer support and feedback, importance of positive outlook and acceptance, and maintaining independence/control over care. The following five barriers to self-management were identified: caregiver burnout, funding and funding policies, lack of accessibility, physical limitations and secondary complications, and difficulties achieving positive outlook or mood. The current study demonstrated that the caregiver, peer support, perceived control and self-efficacy, mood, and accessibility and funding policies make significant contributions to the self-management of individuals with traumatic SCI. As such, the development of a tailored self-management program for individuals with traumatic SCI and their caregivers should incorporate these considerations.

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26 Perspectives on Patient Engagement**CYNTHIA KENDELL**, Research Associate, Cancer Outcomes Research Program, Capital Health/Dalhousie

The process of patient engagement (i.e., including patients in decision making relevant to the design and delivery of healthcare) involves many individuals, not only patients. The objective of this study is to explore various stakeholders' perspectives on patient engagement after participating in a patient engagement initiative. Cancer Care Nova Scotia (CCNS) carried out a two-year patient engagement project with the assistance of an advisory committee comprised of cancer patients, survivors, representatives of community-based organizations, and health professionals. Once complete, five committee members participated in a qualitative study, consisting of semi-structured telephone interviews with a project team member. Participants were asked about their experience on the committee (e.g., Did you feel valued? Was the experience meaningful?), barriers and facilitators to participation, and strategies for improvement. A thematic analysis of interview transcripts was carried out, consisting of reviewing transcripts, coding text, and identifying data patterns and prevalent themes. Participant responses were overwhelmingly positive with participants feeling valued and believing that the work being done would ultimately improve the care of cancer patients in the province. Where barriers were identified they were related to the ability to attend meetings (i.e., time, work commitments, issues with telehealth). Facilitators included the work and support of the project team, high regard for other committee members, and feeling 'taken care of' at meetings (i.e. travel reimbursement, lunch provision, availability of telehealth, etc.). Committee involvement was viewed as a learning experience, during which participants gained a better understanding of decision-making processes in healthcare and the work being done by CCNS, and as an opportunity to meet and get to know other stakeholders in cancer care. Committee participation as a model for patient engagement was effective in this case, if engagement is considered a goal in and of itself. The sustainability of these initiatives, however, requires consideration of the impact on broader outcomes which are often difficult to assess.

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34 Planning for Health Workforces and Health Care Systems Based on Population Health Needs: A Systematic Literature Review**ADRIAN MACKENZIE**, Senior Analyst/Student, Dalhousie University/Memorial University of Newfoundland

To synthesize the existing literature on needs-based health human resources (HHR) and health systems planning. A systematic, electronic literature search was conducted. The search was limited to English language research and grey literature published between 1990 and 2013. Computer database searches included Pubmed, CINAHL, EconLit, National Library of Medicine, PsychArticles, PsychInfo, ABIInfrom, Informa health care e-books, Web of Science, and the Cochrane library using the following keyword and MeSH headings, decided in consultation with a library scientist: health human resources planning, health human resources, health care delivery, health planning, health policy, health workforce planning, population health care needs, needs-based planning and population health care needs assessment. Forward and reverse citation mining was also performed. The search yielded over 2000 citations which were reviewed according to predetermined criteria. Thirty five papers explicitly considered measures of health needs in determining HHR or health system requirements and were included in the review. Most of the research was Canadian. Twelve different professions were considered in these articles, most commonly nurses and physicians. A wide and growing range of measures of health care needs were utilized, including incidence or prevalence of various chronic and infectious diseases, mental health conditions, injuries, self-assessed measures, standardized mortality ratios, and fertility rates. The most frequently cited challenges were obtaining appropriate data on health care needs and levels of service. Ensuring political will to implement and maintain needs-based planning approaches was the most commonly cited non-data challenge. A range of planning methods, frameworks and tools are available to HHR planners and policy makers seeking to be more responsive to population health needs. Although there is growing endorsement of the principles of needs-based HHR planning, practical implementation of such methods is only emerging in a few countries. Besides the growth in the number and range of these tools, factors supporting their implementation include improved access and quality of HHR data that reflect a broad understanding of health, the integration of needs-based HHR planning into broader health and systems planning and improved partnerships between researchers and research users.

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47 Politics and policy-making in Canadian cancer drugs: The role of Avastin funding in Ontario in shaping the pan-Canadian Oncology Drug Review

ANSON TANG, Clinical Lecturer, University of Waterloo

The objective is to examine the background behind the 2009 Avastin (bevacizumab) funding issue in Ontario for treatment of metastatic colorectal cancer, how patients' access complaints were investigated by the Ontario Ombudsman, and its influence on the novel Ontario-based assessment process - the pan-Canadian Oncology Drug Review (pCODR). Kingdon's model of agenda setting was used to carry out an explanatory policy analysis of the key events and influences related to the establishment of the pan-Canadian Oncology Drug Review (pCODR) process in 2010. The role of institutions, interests and ideas and their relative prominence in each of the political, policy and problem streams of Kingdon's agenda setting model was examined through qualitative data analysis. Data sources consulted included relevant scientific literature, news media, Parliament of Canada committee minutes, and government, manufacturer and patient advocacy group websites. In 2007, a House of Commons committee clarified that the Common Drug Review (CDR) targets community-based medications (not intravenous), but does not have expertise to assess cancer drugs. The interim Joint Oncology Drug Review (iJODR) was established in 2007 which enabled manufacturers of cancer drugs (intravenous or oral) to make one submission through Ontario. Decisions resulting from these reviews would be considered nationally (except in Quebec)- but would not be binding. Further to these developments, a challenge to the capped funding of Avastin in Ontario emerged in 2009 as a focusing event, reinforcing the problems with differential access to cancer drugs across the country. An unlikely policy entrepreneur, the Ontario Ombudsman, opened a window for policy change through his scathing investigation, 'A Vast Injustice.' In 2010, pCODR succeeded iJODR. Ontario based, pCODR makes recommendations nationally (except Quebec), guiding cancer drug funding. pCODR follows the Accountability for Reasonableness framework, encompassing principles not always demonstrated by iJODR, e.g. transparency, representation (from patients). However, pCODR's recommendations are not binding. Thus, potential for inequitable national cancer coverage persists.

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20 Primary Care Reform in Ontario: Impact on the supply and distribution of family physicians from 2002-2010

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To determine changes in the supply and distribution of family physicians within different organizational models of practice in Ontario during a period of major primary care reform in physician payment models and organizational models of primary care delivery. Longitudinal analysis using GIS mapping of physician supply in Ontario from 2002-2012 using administrative data housed at the Institute for Clinical Evaluative Sciences to identify physicians, their practice locations and practice and payment models. Mapping of the distribution of family physicians in the province by year from 2002-2012 will be presented. The presentation will include analysis at the level of the Local Health Integration Network (LHIN), Sub-LHIN and census subdivision levels. Physician numbers per population will be presented overall, for comprehensive family physicians only and by payment/practice model. Analysis is in progress and will be complete prior to the conference. These reforms were undertaken in response to significant problems with the supply and distribution of family physicians in the early 2000's. Final conclusions on changes in these key health human resource indicators will be presented at the conference as analysis of the results is in progress.

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38 Quality of Care in Primary Healthcare Clinics (PHCs) in Manitoba: A Comparative Study

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To assess: (1) how patients and physicians rank eight core attributes of quality of care; (2) what are their perceptions of the overall quality of care; and, (3) whether these two groups differ in terms of their perceptions about the overall quality of care and its constituent elements. The overall quality of care is defined in terms of a set of eight core attributes taken from contemporary conceptual frameworks for assessing primary healthcare systems. Attributes are assessed using sub-scale questions picked from previously developed and validated national level survey instruments (e.g., PCAS, PCAT-S, CPCI, VANCOS, NPS). Data has been collected through structured questionnaire survey utilizing Likert items and scale to capture respondents' perceptions of care. Both descriptive and non-parametric statistical methods (e.g., Mann-Whitney U-test) will be used for data analysis. Information on possible confounding factors will help understand the response patterns across different cohort groups. Initial analysis (based on a sample of 250 patients and physicians) suggests that both groups have high opinions about the overall quality of care (score ≥ 4 on a 1-6 scale). However, physicians are more satisfied (100% score > 4) compared to patients (87% ≥ 4). Regarding individual attributes, 'Interpersonal communication' and 'Respectfulness' received the highest average score (5) and long-term and preventive health management received the lowest score (2.7). The long waiting time appears to be a concern of most patients - 43% of the urgent cases could secure a same-day appointment and less than 3% of the non-urgent cases had the same privilege. Patients and physicians are generally satisfied with the overall quality of care of the PHCs. Patients and physicians seem to have similar views regarding the overall quality of care. Prevalent concerns include long waiting time and poor long term health management, which could be the focus for future interventions.

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11 Shiny and new: examining patient and physician use of non-oral osteoporosis medications in Ontario, Canada

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Two non-oral osteoporosis drugs were added to the public drug formulary in Ontario, Canada in the last decade: annual zoledronic acid in 2006 (modified in 2012) and semi-annual denosumab in 2012. We aimed to describe the use and persistence of these new drugs since formulary addition. We used Ontario administrative claims data to identify new users of zoledronic acid and denosumab from formulary entry through to 2013. Descriptive characteristics of prescribing physicians and patients were summarized. The number of new patients and new prescribing physicians were plotted by month and examined over time. Time series analysis was used to examine the impact of the formulary change to zoledronic acid in 2012. Persistence with index therapy and switching to different therapies was examined over time. We identified 1,508 zoledronic acid users (86% female, mean age=77) treated by 630 physicians (27% specialist) and 16,736 denosumab users (97% female, mean age=79) treated by 2,904 physicians (12% specialist). More denosumab users had prior oral therapy (55% vs. 34%), yet fewer received bone mineral density testing (20% vs. 33%). In comparison to zoledronic acid (<5 new prescribers and patients), uptake of denosumab was rapid (>450 new prescribers and >1200 new patients) in the first two months on the formulary. Time series analysis identified a significant increase in zoledronic acid use following a modification to the limited use criteria. We identified that 57% (zoledronic acid) and 55% (denosumab) patients persisted beyond the first year, and 30% of zoledronic acid patients persisted for 3+ years. Zoledronic acid and denosumab may be enticing options to improve persistence with osteoporosis therapy. Over half of patients received doses beyond the first year, and more than a third received prior oral therapy. A provincial formulary modification that broadened access criteria for zoledronic acid in 2012 significantly increased prescribing.

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50 The Impact of Audit and Feedback on Community Pharmacist's Provision of Patient Care Services: A randomized trial**NANCY WINSLADE**, Assistant Professor, McGill University

Changes to provincial policies are authorizing and funding community pharmacist's provision of services targeted at improving patient's use of medications. Uptake in community pharmacies is, however, inconsistent. This cluster randomized controlled trial evaluated if comparative feedback of pharmacist's performance on three quality of care indicators increased provision of targeted services. All Quebec community pharmacies who did not opt out of the feedback intervention were randomized. Using provincial billing data for medications and pharmacist's services, intervention pharmacies received their comparative performance feedback relative to other pharmacies with recommendations for performance improvement. Control pharmacies received feedback after the 12 month evaluation period. Indicators were dispensing rates of antihypertensive and asthma rescue medications (SABA) to patients with documented non-compliance and, for SABA-overuse, no inhaled corticosteroids. Control versus intervention pharmacy-specific performance on three indicators was the primary outcome with a secondary outcome of rates of provision of professional services targeted at these medication-use problems. 1285 of 1814 pharmacies randomized had complete follow-up information. Baseline prevalence of quality of care problems were comparable (control / intervention hypertension non-adherence 27.2% / 27.4%, SABA overuse 48.0% / 48.3%, no inhaled corticosteroid 30.6% / 29.4%) as were monthly rates of targeted pharmaceutical-opinions (hypertension underuse 0.113 / 0.124, asthma overuse 0.019 / 0.024). Although there was temporal improvement in performance for the asthma indicators, twelve month follow-up performance did not differ between groups for any of the indicators (control / intervention hypertension underuse 27.9% / 28.0%, SABA overuse 45.5% / 44.6%, no inhaled corticosteroid 24.06% / 23.2%) or monthly rates of hypertension-related pharmaceutical-opinions. Targeted recommendations for SABA overuse lead to significantly higher rates of asthma-specific pharmaceutical-opinions in the intervention group (0.021 vs. 0.033, $p < 0.05$). Performance feedback with actionable recommendations lead pharmacists to increase provision of asthma-specific services. Potential reasons for this not translating into improved patient care include challenges with inter-professional communication of pharmacist's recommendations. Further evaluation should identify strategies to increase pharmacist's provision of professional services and ensure translation into improved patient care.

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37 The Late Career Nurse Initiative: Successful leadership and stakeholder engagement in achieving outcomes**VERA NINCIC**, Lawrence S. Bloomberg Faculty of Nursing

To explore perceptions of leaders associated with implementation of the Ministry of Health and Long-Term Care's Late Career Nurse Initiative (LCNI) for 2012/2013 that involved the funding of organizations to implement a .20 full time equivalent reduction of physically or psychologically demanding duties of nurses aged 55 or over. Interviews of nurse leaders from Long-term Care (LTC) facilities, Home Care, and hospitals participating in the LCNI were conducted to obtain information about leaders' experiences with the initiative and explore perceptions relating to the challenges and benefits. Interviews of nurse leaders from non-participant organizations were also conducted and analyzed to offer an insight into the reasons for not participating. The interviews were recorded, transcribed, and analyzed by the research team using a qualitative content analysis approach in identifying key themes. The analysis of 53 nurse leader interviews highlighted the critical role of supportive and strategic leadership for achieving quality outcomes at the nurse, patient and organizational levels. Common themes emerged, including: leveraging nurse buy-in and expertise; having an effective and realistic plan with clear goals/ expectations; optimizing staff and resources; and monitoring, evaluating and sharing feedback. One of the main challenges to managing resources related to nurse replacement for the project activities when unanticipated work demands occurred. Of central importance are stakeholder engagement, communication and team cohesiveness. Outcomes achievement related to establishment of mentorship relationships, utilization of nurses' skill and knowledge, and importance for nurse retention. Supportive and strategic leadership in health care organizations should be aimed at optimizing staff and resources. The LCNI highlighted the importance of aligning project work with organizational priorities and individuals' interests; monitoring, evaluating and sharing feedback; planning timeframes that are realistic in scope; and engaging stakeholders.

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18 The Road to Learning Health Care Systems in Canada**WILLIAM GARDNER**, Professor of Pediatrics, Dalhousie University

Developed in the United States (US), Learning Health Care Systems (LHCSs) are health care organizations that continuously gather and evaluate data on health services, to improve health outcomes and use resources more efficiently. We review the LHCS concept and provide an overview of requirements for establishing LHCSs in Canada. An LHCS is structured so that it has both the capacity and the motivation to continuously generate data that can be used to improve performance and increase efficiency. Many changes would be required to implement an LHCS including the following two critical components: 1) a system for measurement of health outcomes; and 2) a funding structure that incentivizes innovation to improve outcomes and achieve better value for money. We discuss the Accountable Care Organization (ACO) and the value-based contract in the US and explore how these ideas could be implemented in Canada. Canadian hospitals are funded through global budgets that provide few incentives for cost saving and that are only weakly linked to performance. Developing an LHCS under these circumstances would require, first, a system capable of accurately measuring health outcomes in the population it serves. This system must be sufficiently accurate to characterize change over time in population health and health equity. Second, given sufficiently accurate performance measurement, funders could link budgets to health system performance. As a thought experiment, we consider a system in which the federal health transfer payment to a province could increase if the population's health or equity improved relative to a baseline, and in which the federal contribution would not decline if the province showed evidence of increased efficiency. LHCSs have been transformative in US health care organizations. Establishing LHCSs in Canada would require changes in culture, structure, information technology, and health system performance measurement. Without clear incentives for improved efficiency and improved performance demonstrated through objectively measured results, health care reform in Canada is unlikely to be successful.

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29 The Three Paradoxes of Patient Flow**SARA KREINDLER**, Researcher, Winnipeg Regional Health Authority / University of Manitoba

Every Canadian jurisdiction grapples with the conundrum of patient flow: how to ensure that patients move smoothly through the system to receive the care they need, when and where they need it. This study investigated the source of one large, urban health region's intractable difficulty improving flow. A mixed-methods design included in-depth qualitative interviews with 62 senior and middle managers representing the region and its programs and sites, analysis of key flow indicators (1999-2012), and review of available documents on current and past flow initiatives. To understand why most initiatives had fallen short of expectations, it was necessary to redirect the focus from the micro (initiative-by-initiative) to the macro (system) level. Stakeholders expressed highly divergent perspectives on system-level issues, sometimes disagreeing on facts and often on their interpretation; accordingly, dialectical analysis sought to ascertain what structural realities gave rise to such contradictory worldviews within the same system. The Region's matrix structure, in which site-program power struggles persist, is a challenging environment for system change. Analysis revealed three paradoxes: (1) 'Many Small Successes and One Big Failure': past initiatives have improved parts of the system but failed to fix underlying system constraints. (2) 'Your Order is My Chaos': the definitions and rules that improve the organization of care for my patients may create obstacles for yours. The crux of site-program conflict is that sites define patients in terms of their location in the system, whereas programs define them in terms of their needs/characteristics. When patients' needs do not fit any available program, flow stalls. (3) 'Your Innovation is My Aggravation': Sites and programs also clash over who may initiate change. To achieve major gains in flow, the Region cannot simply sponsor myriad improvement projects throughout the system. Rather, it must establish clear accountabilities within a coherent overall approach - ideally, defining patient populations by needs, analyzing their entire trajectory of care, and developing a consistent process to better meet their needs.

32 Tools used to measure organizational attributes associated with chronic disease management within primary care**JULIA LUKEWICH**, BNSc, RN, PhD Student/Researcher, Queen's University

Given the increasing emphasis being placed on managing patients with chronic diseases within primary care, there is a need to better understand which primary care organizational attributes affect the quality of care that patients with chronic diseases receive. This study aimed to identify, summarize and compare data collection tools that describe and measure organizational attributes used within the primary care setting worldwide. Systematic search and review methodology was used, as described by Grant & Booth (2009). Systematic search and review methodology consists of a comprehensive and exhaustive search that is based on a broad question to identify the best available evidence. Unlike systematic reviews, the topic area in systematic search and reviews is not sharply focused, considers a wide range of study designs for inclusion, and does not require included articles to undergo critical appraisal. A total of 30 organizational attribute data collection tools that have been used within the primary care setting worldwide were identified. Specifically, 3 international, 8 Canadian, 13 American, 5 European, and 1 Australian organizational attribute data collection tools were identified and summarized in this study. The tools varied with respect to overall focus and level of organizational detail captured, theoretical foundations, administration and completion methods, types of questions asked, and the extent to which psychometric property testing had been done. The tools utilized within the Quality and Costs of Primary Care in Europe (QUALICOPC) study and the Canadian Primary Healthcare Practice-Based Surveys were the most recently developed tools. Furthermore, the Canadian Primary Health Care Practice-Based Surveys was the tool identified in this systematic search and review that collected information on the most organizational attributes. There is a need to collect primary care organizational attribute information at a national-level to better understand factors affecting the quality of chronic disease management. The tools identified in this study can be used to assist countries in establishing a national-level data collection strategy to collect this important information.

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44 Tracing Patient Centred Care Publications Over the Last 67 Years**PAULA ROWLAND**, Assistant Professor, University of Toronto

Increasingly, patient centered care (PCC) is considered an essential element of quality within health systems. The term itself remains ambiguous, taking on different meanings in different institutions and different times. Understanding how the concept is deployed helps us understand what constitutes PCC and how we might organize ourselves to achieve it. This study involved a publication analysis of literature available through MedLine and CINAHL databases from 1946 until 2013. 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. There is a substantial and ongoing increase in publications mapped to the subject heading 'patient centered care', starting in the early 2000s. The most striking increase in publications is within the fields of health administration and health service research. These results are examined in light of sociological theories related to social movements in health. In our analysis, we define social movements as collectivities acting with some degree of organization and continuity for the purposes of challenging or defending authority, whether that authority is institutionally or culturally based. This theoretical lens gives a way to consider 'patient centred care' as a new kind of social movement, intersecting in particular ways with policy makers, administrators, and clinicians. Thinking of PCC as a social movement allows us to consider questions of patient identity, to examine the movement's goals and strategies, and the relationship with healthcare institutions and the governing of healthcare itself. This study suggests that PCC is taking on new meanings, reflective of larger social movements at play.

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8 Understanding Care Transition Interventions: Case Studies from Ontario**KAREN BORN**, PhD Candidate, Institute of Health Policy, Management & Evaluation

Care transition interventions to reduce hospital readmissions are well established. However, randomized controlled trials of these interventions have mixed results. The influence of organizational context on interventions is cited as potential cause of heterogeneity. This aims to understand the interplay between organizational context and the interventions in three Ontario cases. Three case studies were developed following Yin's (2013) holistic case study design. Case study selection was purposive and based on explicit criteria. Within each case, data collection included document review, participant observation and key informant interviews (n=41). This approach aimed to understand interplay between organizational context and complex interventions through multiple perspectives and is concerned with the reliability of case study data, and ensures validity through collecting multiple sources of data. Data analysis was based on an integrated framework from realist evaluation (Pawson and Tilley 1997), implementation science (Kilbourne 2007) and quality improvement science (Shekelle 2012). Results include rich, descriptive case studies of intervention introduction, adaptation and implementation and cross case analysis to elucidate shared themes across cases. Cross case analysis found shared organizational contextual features that influenced the intervention which included (1) seed funds to support the intervention and the presence of dedicated staff, (2) physician leadership of the intervention both strategically and operationally, (3) strategic alignment of the intervention's aims with the organizations' strategic plan and goals, (4) history of (intra and inter organizational) collaboration between organizations involved in the intervention eg. Primary care and community care, and (5) cultural capacity and readiness for change from front-line staff. Study approach and methods provide approach to evaluating interplay between organizational context and complex interventions (such as care transition interventions). Study findings provide insights around possible reasons for heterogeneity of intervention outcomes, and may assist organizations considering implementing care transition interventions by highlighting organizational contextual factors to consider.

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6 Understanding the Ontario government decision to implement nurse practitioner-led clinics: a health policy analysis**SARAH BOESVELD**, PhD Student, Health Policy PhD Program, McMaster University

In November 2006 the Ontario government announced the first of a series of nurse practitioner (NP)-led primary healthcare clinics. There has been little published analysis using a policy lens to understand this decision. The aim of this analysis is to explain why the Ontario government took the decision to implement NP-led clinics by considering the relative roles of institutions, interests and ideas on the policy process. This qualitative policy analysis draws on a variety of data sources, including: legislative and policy documents, Legislative Assembly of Ontario debate transcripts, professional organization documents, peer-reviewed articles, and relevant media coverage. The 3I framework, which considers how three categories of factors (institutions, interests, ideas) influence policy development, is utilized as the policy analysis framework. Each of the relevant factors was classified as either a facilitator of the introduction of NP-led clinics, neutral, or a barrier to the introduction of NP-led clinics. The most important factors to explain why NP-led clinics in Ontario were adopted include the following: an institutional legacy of nursing provision of care in rural and remote areas; a favourable policy climate that made it possible for the nursing community to push through suitable policy solutions to address primary healthcare priorities; an active nursing community with a desired policy solution that matched government goals and needs; and public values that were supportive of an expanded NP role. These findings suggest that the adoption of NP-led clinics in Ontario emerged from an interaction of institutions, interests and ideas. Analyses of future policy decisions that systematically consider all three factors (each of the 3 'I's) will promote more robust analyses of policy development and implementation processes.

46 What Matters Most During End-of-Life Care: Perspectives from Palliative Care Providers

HSIEN SEOW, Cancer Care Ontario Research Chair in Health Services Research, McMaster University

Research has documented what matters most in end-of-life (EOL) care from the perspective of seriously ill patients and their families. However few studies have described this from the perspective of palliative care providers, who have daily encounters with death and dying. This study's objective is to address this knowledge gap. We used in-person, semi-structured interviews with front-line, managerial, and administrative staff involved in EOL care across 15 regions in Ontario. Qualitative data were interpreted using thematic coding analysis and grounded theory. Data from 107 respondents were analyzed, from which 40 unique themes emerged, further grouped into 9 parent themes. 44% of our respondents were nurses, 19% physicians, and 37% other. The three most frequently cited themes were 1. Fulfilling Patient Wishes (e.g. aligning care plan to respect and honor patient preferences; enabling patient control), 2. Pain and Symptom Management (e.g. addressing pain), and 3. Supporting Family Needs (e.g. providing education and respite to the family). The two most frequent parent themes were 1. Addressing More than the Physical Needs (e.g. communication; facilitating dignity, peace, and closure) and 2. the Nature and Quality of Palliative Care Delivery (e.g. knowledgeable, caring, responsive team). Further analyses by provider type and qualitative quotes will be provided. Quality EOL care extends beyond managing the physical pain, but includes a holistic perspective of care, patient control, and a dedicated healthcare team. Tailoring the provision of care to consider these elements can improve the EOL experience. Findings from this study help denote areas for focusing future quality improvement initiatives.

23 When do we hear back? Timeliness of the consultant note to family physicians in Ontario, Canada

LIISA JAAKKIMAINEN, Family Physician, Scientist, Institute for Clinical Evaluative Sciences

While initiatives to improve the coordination of care for patients across the health care sector have been an increasing focus, little is known about the receipt of information from specialist consultants by family physicians (FPs). This study determine whether information from a specialist visit is received by a FP and if received, the wait time for the receipt of a consultant note. This was a descriptive study of FPs Electronic Medical Record (EMR) data linked to Ontario health administrative data. A convenience sample of 54 community-based FP practices throughout Ontario, Canada were examined. For all patients rostered to these FPs in 2008 and for each medical and surgical subspecialty, the proportion of consultant notes received into the FPs EMR after a full consultation visit was calculated. Wait times were calculated from when a patient saw a specialist consultant to when the consultation note was received into the FP's EMR. Wait times were also examined in related to patient characteristics (age, sex, co-morbidity, socioeconomic status (SES) and continuity of care with their FP) and FP provider characteristics (age, sex, rurality, and participation in a newer primary care model). 65.3% of cardiology and 58.6% of ENT consultation notes were received by the FP within 60 days of a visit. Only 25.5% of psychiatry and 43.5% of plastic surgery consultation notes were received within 60 days of a visit. If a note was received, the median wait times for medical subspecialist notes were between 18 and 43.5 days and for surgical subspecialties between 17 and 41 days. Practice location and size were associated with these wait times, but patient factors were not. Strategies are needed to improve the receipt of information for FPs from consultant physicians.

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Poster Presentations – Day 3

Présentations d'affiches – Jour 3

18 A performance measurement framework for Canada's health system

JACQUELINE KURJI, Project Lead, Consensus Conference, Health System Performance Branch, Canadian Institute for Health Information

To develop a framework for measuring health system performance (HSP) in Canada that is: comprehensive, integrated, theoretically justified, actionable, and aligned with improvement priorities of Canadian jurisdictions. The framework should support improvement by demonstrating the theoretical relationships between its components and achievement of the goals pursued by the health system. Existing international frameworks for health system performance reporting were reviewed, together with recent literature and evidence on organizational and health system quality improvement reporting. The review was used to develop a first draft of a dynamic framework which was assessed for alignment with published health system improvement strategies and objectives of provinces and territories. The framework was adjusted as needed to ensure that there was a place for these improvement priorities. The draft framework was shared broadly with stakeholders and key external advisory groups. Comments and feedback from these groups were incorporated into a final health system performance measurement framework. The framework comprises four interrelated quadrants, linked together in an expected causal chain: Health System Inputs and Characteristics, Health System Outputs, Social Determinants of Health, and Health System Outcomes. Each quadrant contains key performance dimensions, also linked through expected causal relationships. The quadrants sit within demographic, political, economic and cultural contexts. This framework views performance as a dynamic process where it is important to analyze the expected relationships among its different components, with a focus on the end goal of improved health system outcomes, a view useful for performance improvement. The developed framework aligns largely with the health system performance improvement strategies and goals of Canadian provinces and territories and can also be cascaded to support performance measurement frameworks for health care service delivery organizations. The HSP measurement framework is a foundation for integrated health system performance reporting. With a common platform to understand and analyze HSP reporting, a unifying performance measurement framework can reduce perceptions of 'indicator chaos' and support the use of performance information to improve health system performance.

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31 Accreditation of Family Practice Clinics - Utility, Impact and Sustainability

GRACE MOE, Executive Director, Strategic Planning & Special Projects, Westview Primary Care Network/Westview Physician Collaborative

Implementation of Accreditation Canada's Primer Standards in five Westview Primary Care Network/Westview Physician Collaborative Family Practice (FP) clinics to enhance continuous improvement, safety and quality of primary care (PC) services delivery; study the associated processes, costs and outcomes; and evaluate its utility, impact and sustainability. Qualitative Evaluative Research - a case study designed to examine the formative and summative experiences of the five participating clinics, including costs incurred. Evaluation tools included: pre- and post-implementation clinic self-assessments and quality roadmaps; accreditation report; retrospective surveys of clinic providers and staff; and pre- and post-clinic patient surveys. Successful implementation of a Community of Practice PC Quality Improvement (QI) Model (May-November 2013): Use of 1) a centralized QI team to develop/educate policies and procedures that align with nationally established standards in patient safety and worklife environment, among others; and build clinic-based leadership capacity for ongoing QI; and 2) clinic-based leadership teams to operationalize policies/procedures and facilitate change management within clinic. All five clinics received a Primer Accreditation Award. Increased awareness of and adherence to national standards were evident. Cost burden per clinic (size/HR-adjusted) is being tabulated. Clinic staffs cited benefits from clinic implemented QI activities, but were uncertain if 'accreditation' added value. Impact on patient perceived improvement in access and quality shall be examined via a third Clinic Patient Survey in January 2014. Primary utility of formal accreditation is validation and recognition. Cost will limit QI and formal accreditation pursuits by standalone fee-for-service family practice clinics. System resources and commitment are needed to sustain an accessible, safe and quality primary care delivery system that implements as well as demonstrates continuous QI.

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23 Activity-Based Funding of Hospitals and its impact on Mortality, Readmission, Discharge Destination, Access, and Equity: A Systematic Review and Meta-analysis

DANIELLE MARTIN, MD, CCFP, MPP, Women's College Hospital

To inform decision-makers about the worldwide evidence bearing on how activity-based funding (ABF) of hospitals affects quality of care, access to care, equity, hospital and total health care system costs, and efficiency. Under ABF, hospital services are prospectively classified into clinically meaningful 'bundles' of care ordinarily provided to patients admitted with particular diagnoses. Hospitals are paid a fixed amount for each episode of care delivered to each patient served; the money follows the patient. We undertook a systematic review of the worldwide evidence on ABF since 1980, conducting a meta-analysis and narrative analysis of how ABF affects mortality (after acute or during post-acute care), hospital readmission rates, and discharge destination. We also conducted a narrative analysis-only describing how ABF affects severity of illness/case mix, volume of care, and patient characteristics. Our literature search identified over 28,000 citations of which 16,565 were unique. Of these, 260 studies representing 64 countries (either singly or in aggregate) assessed the impact of ABF on a least one of our outcomes of interest (i.e. quality of care, access to care, equity, cost, and efficiency). After duplicate full-text assessment, 66 studies proved eligible for our first report where we describe how ABF affects quality of care as measured by mortality and readmission rates; access as measured by volume of care; equity as evidenced by severity of illness, change in case mix, patient socio-demographic characteristics; and discharge destination. Opinion is divided within the Canadian health care policy community as to whether the risks associated with ABF implementation would outweigh the benefits. Our systematic review provides a more robust knowledge base to better inform decision-makers of how ABF is likely to affect our hospitals and health care system as a whole.

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9 Are home visiting programs for at-risk families effective in improving child outcomes? A PATHS Equity for Children project

MARIETTE CHARTIER, Research Scientist, Manitoba Centre for Health Policy, University of Manitoba

The objective of this population health intervention research is to determine the effectiveness of the Manitoba's provincial home visiting program for at-risk families in improving children's outcomes. These programs have been evaluated in highly structured and supervised conditions which may provide different results in real-world delivery systems. Home visiting program data were linked to administrative data housed at the Manitoba Centre for Health Policy through a scrambled health identifier. After imputations, program data was divided into 4,565 children who received the program and 5,172 children who have not. A propensity score was calculated with logistic regression using 21 variables that may influence program participation such as alcohol use, smoking and violence between parents. These scores were then used to incorporate inverse probability of treatment weights into the analyses to address the selection bias inherent in delivering a voluntary program. Logistic regression was also utilised to test for an association between program participation and child outcomes. The average treatment effects were calculated for immunizations for one and two year old children. No differences between the groups were found in rates of complete immunization for one-year old infants (72% versus 72%). However, complete immunizations were slightly higher among two-year old children from program families (51%) compared to non-program families (49%; Relative Risk (RR): 1.05). Estimates for children in the program (treatment effect for the treated) and those not in the program (treatment effect for the untreated) were similar to the average treatment effect reported above. Rates for continuity of medical care, children being taken into care, injuries related to child maltreatment and child development scores will be shown using the same method. Home visiting programs reach the most vulnerable families and can potentially support families and improve child outcomes. These results will be useful for program planners in providing insights for program improvement. For example, the treatment effect on immunization rates was lower than expected and could be increased by improving the curriculum and training for home visitors.

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36 Building a program of excellence: Strengthening Families, Maternal Child Health (SF-MCH) Program in Manitoba First Nation Communities

WANDA PHILLIPS-BECK, Nurse Research Manager, Assembly of Manitoba Chiefs

This presentation will describe the Strengthening Families, Maternal Child Health Program (SF-MCH) Manitoba First Nations, focusing on Peer Support Program and Sacred Babies campaign. These initiatives were designed, developed, delivered and supported by 14 First Nations in Manitoba and the Assembly of Manitoba Chiefs SF-MCH Regional Program and Practice Support Team. Both were designed with the goal of improving maternal and child health outcomes through the enhancement of effective family and targeted education to increase awareness of risk factors related to SIDS and infant mortality. The Peer Support Program is a quality assurance assessment process examining program delivery elements utilizing standardized measurement tools and protocols, while maintaining flexibility to incorporate individual or community cultural strengths. The Sacred Babies campaign was a multi-media radio and poster campaign with clear messaging focusing on safe sleep, safe temperature and smoke free environments in Phase 1. Phase 2 is a collaborative process involving community, health technicians and health professionals in the development of an educational curriculum and video. A community development approach was used in the development of both the Peer Support Program and Sacred Babies campaign. The philosophy mirrored the individual SF-MCH practitioners working directly with families: that it be solution centered, family/relationship focused and strength based. Peer Support has resulted in programs that remain true to their objectives, improved data collection/use and interpretation of this data, and improved inter-community networking - stronger more effective programs leading to improved outcomes (Eni, 2012). The Sacred Babies campaign is still ongoing and will be further evaluated. Involving First Nations and utilizing a community development approach is critical in creating education and support programs. The AMC team, in collaboration with the 14 SF-MCH sites, are using their collective experience to reach all 63 communities in the development of a health promotion campaign to reduce the incidence of risk factors related to SIDS and infant mortality.

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47 Canadian Health Expenditures: Analyses, Forecasts and Simulations

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The objective is to examine factors influencing Canadian health expenditures in different use-of-fund categories (hospitals, physicians, drugs, other institutions, other professionals, capital, and public health) and relationships among the components. The study also estimates the impact of ageing on future expenditures and produces a forecast of healthcare expenditures. The data are obtained from the CIHI's report 'National Health Expenditure Trends, 1975 to 2012'. Four analyses were performed: 1. Determinants of public health expenditures, by use-of-fund categories; 2. Relationships among use-of-fund categories; 3. Forecasts of health expenditures under several scenarios to 2030; 4. Impact of ageing on future healthcare expenditures. The models for analyses 1, 3, and 4 are estimated as a set of several separate equations using Seemingly Unrelated Regression. Each equation is a panel of data across 13 provinces/territories, over 38 years. The second analysis is done using vector auto-regression, using a panel of annual data. We found that: 1. Expenditures for different components are affected by different economic factors, such as Gross Domestic Product, population, physician compensation, etc. 2. A change in one component leads to a change in other components, e.g., a sudden increase in physician expenditures is followed by significant and prolonged increases in all other components of expenditures. 3. This study forecasts about 6% growth of expenditures annually; this growth will not be seriously impacted by high or low economic growth (only about 0.5% - 1%). However, this growth would decline to about 3% if the recent slowdown in health spending continues. 4. Expenditures among seniors grow slower than they do for younger people. This suggests that other studies may overstate the impact of ageing on health expenditures. As countries battle the issues on cost containment and cost effectiveness of healthcare expenditures, it is important to forecast the healthcare expenditure and to understand the underlying factors that influence the growth to help shape policies that would contain the expenditure without compromising the health of the Canadians.

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27 Comparing the health and economic impacts of two screening strategies for colorectal cancer in Canada using the Cancer Risk Management Model (CRMM)

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To compare the health and economic impacts of biennial fecal immunochemical test (FIT) at the 100 ng/mL cut point and biennial guaiac fecal occult blood test (FOBT) for colorectal cancer (CRC) screening using the Cancer Risk Management Model (CRMM) 2.1. The CRMM is a continuous-time, Monte-Carlo microsimulation model that simulates the natural history of CRC from onset within the colon or rectum, and progression to mortality through different stages of cancer. For this analysis, two hypothetical scenarios were constructed: biennial FIT and biennial FOBT compared to 'no screening' to evaluate the potential benefit of the programs. Eligibility criteria included average-risk males and females aged 50-74 with a 60% participation rate recruited from 2014 onwards. A ten-year phase-in period was assumed for the cohort in 2014 and a one-year phase-in for cohorts entering in 2015 onwards. All costs reported are undiscounted. Compared to 'no screening', biennial FIT and FOBT demonstrated a reduction in the incidence of CRC of up to 16% and 6% respectively by 2050. CRC-related deaths decreased by 26% with FIT and 15% with FOBT by 2050. An increase in the average annual cost of screening and treatment was estimated to be \$158M and \$233M (\$2008 undiscounted). The lower increased costs with FIT were due to reduced treatment costs by preventing more cases of CRC compared to FOBT. By 2050, the average annual economic gains (income productivity and government tax revenue generated) with FIT and FOBT were \$1.9B and \$1.2B respectively. The ICERs for FIT and FOBT were estimated to be \$2,600 and \$13,700 (cost/QALY) respectively, when compared to 'no screening' (3% discount). CRMM indicates that a biennial FIT screening program would demonstrate a greater reduction in the incidence and deaths due to CRC as well as a superior cost-effectiveness profile than biennial FOBT in the Canadian population aged 50-74.

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2 Comparing the measurement properties of the EQ-5D-3L and 5L in the general population

CALYPSE AGBORSANGAYA, Research Associate, University of Alberta

The EQ-5D is a commonly used measure of population health status. We compared the measurement properties of two versions of the EQ-5D, the 3-level (3L) and the recently introduced EQ-5D 5-level (5L). Data were available from two cross-sectional surveys of the general population of adult Albertans (over 18 years old) in Canada. We compared the measurement properties of the EQ-5D-3L (in 2010) and 5L (in 2012) by determining their feasibility and discriminatory power (Shannon indices). The discriminatory power for each instrument was assessed by determining the Shannon index (H') and Shannon Evenness index (J'). Both indices are descriptive measures of the discriminatory ability of an instrument and are needed for useful interpretation of the measurement power properties of a scale. The study included 5010 and 4803 respondents who reported to the 2010 and 2012 surveys, respectively. Respondents were comparable in both surveys (48% female with mean age 47 (SD, 17) years for 2010; 55% female with mean age was 48 (SD, 17) years for 2012 survey). The proportion of respondents with at least one missing value in all dimensions was 1.3% for the 3L version and 1.1% for the 5L version, indicating good feasibility for both dimensions. The absolute discriminatory power was higher on average with the 5L (mean 0.79 versus 0.52 for 3L), and the relative discriminatory power was also reasonably higher for the 5L (mean 0.09 versus 0.06 for 3L). Both instruments performed similar in terms of feasibility, whereas the 5L version had higher discriminatory power. This indicates that the measurement properties of 5L are better than 3L in a general population sample. Further longitudinal analysis is needed to compare the sensitivity of both instruments to detect change over time

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54 Contextualizing the Effectiveness of a Collaborative Care Model for Diabetes and Depression in Primary Care: A Qualitative Assessment

LISA WOZNIAK, Research and Evaluation Coordinator, University of Alberta

TeamCare in Primary Care Networks (TeamCare-PCN), a collaborative care model for depression and diabetes adapted from a proven model in the United States, was effective in improving depressive symptoms among patients in 4 PCNs in Alberta. We contextualize its effectiveness by describing implementation fidelity and PCN staff's perceptions of effectiveness. We used a mixed-methods approach and the RE-AIM framework to comprehensively evaluate TeamCare-PCN. Qualitative data sources related to the RE-AIM dimensions of Implementation and Effectiveness are reported here and include: interviews with PCN staff (n=36) including the nurse care managers tasked with delivering TeamCare-PCN; focus groups (n=4) with the researchers who supported PCN staff during implementation; and systematic documentation (e.g., standardized checklist and field notes). Data were managed using Nvivo 10 and analyzed using content analysis. The data were read and re-read to identify codes or concepts. Similar codes were grouped together and emerging themes were organized into higher-level categories. Based on our comprehensive assessment, the TeamCare-PCN intervention components were implemented as intended but without optimal fidelity across the PCNs. Major deviations from the intended model included varying physician participation due to the existing culture (e.g., autonomy of physicians, traditional physician-nurse relations, and typical referral practice) and limited comfort with collaborative care for all team members. Despite the sub-optimal fidelity, respondents identified several implementation facilitators including: training; on-going implementation support; preexisting relationships; and professional and personal qualities of the care managers. PCN staff reported varying opinions regarding the perceived effectiveness of TeamCare-PCN; however, more PCN staff anticipated improved patient outcomes as a result of the key intervention components, including active patient follow-up, specialist consultation and treat-to-target principles. TeamCare-PCN resulted in improved depression care and outcomes similar to those demonstrated in previous trials despite its sub-optimal implementation in Alberta's primary care context. However, a stronger culture of collaborative care may have yielded greater implementation fidelity possibly resulting in even better outcomes than achieved here.

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52 Costs and admissions for elective surgical procedures in for-profit and not-for-profit hospitals in France in 2009-2010

WILLIAM WEEKS, Professor, The Dartmouth Institute for Health Policy and Clinical Practice

In 2008, France implemented a new reimbursement methods designed to make the French hospital system more market oriented. We wanted to examine French citizens' use of for-profit and not-for-profit hospitals for common elective procedures in 2009 and 2010 and determine whether patterns changed during that time. We obtained datasets that capture all discharges from public and private sector French hospitals in 2009 and 2010 and examined admissions for hip fracture and twelve elective surgical procedures to for-profit hospitals, and not-for-profit hospitals (which included public sector and not-for-profit hospitals). We examined relative use of for-profit and not-for-profit hospitals for these procedures, and we calculated what the total reimbursement for each procedure was under current conditions, what it would have been had not-for-profit rates and performance been applied to all cases, and what it would have been had for-profit rates and performance been applied to all cases. For every admission type, mean per-admission reimbursements in for-profit hospitals were significantly lower than those in not-for-profit hospitals; in most cases, for-profit hospitals had shorter lengths of stay and reported a higher number of secondary diagnoses than not-for-profit hospitals. We found considerable variation in reliance on for-profit hospitals for the conditions we examined: patients were least reliant on for-profit hospitals for hip fracture and CABG and most reliant on for-profit hospitals for radical prostatectomy, spine surgery, and tonsillectomy. Over the study period, French patients became relatively less reliant on for-profit hospitals. Lower reimbursement rates at for-profit hospitals resulted in hypothetical annual cost savings of over 600 million euros, or about 20% of what reimbursements might have been had not-for-profit rates been applied to all admissions. Our study suggests that French for-profit hospitals focus on providing elective surgery and do so more efficiently and predictably than their not-for-profit counterparts. Mechanisms to fairly and accurately evaluate and compare outcomes and appropriateness of admissions to for-profit and not-for-profit French hospitals are required to extend this work.

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25 Demonstrating the effectiveness of knowledge transfer and exchange (KTE) to accelerate progress in cancer control in Canada

MELANIE MAYOH, Strategy Analyst, Canadian Partnership Against Cancer

To measure the effectiveness of knowledge transfer and exchange (KTE) efforts that are critical to supporting the implementation of Canada's cancer control strategy and the achievement of cancer control outcomes. Improving and accelerating the use of cancer knowledge to reduce the burden of cancer on Canadians is core to CPAC's mandate. CPAC works collaboratively with partners to implement evidence-based improvements and introduce efficiencies across the system. This is done by convening partners, co-creating solutions to shared problems, catalyzing action through large-scale implementation, and brokering knowledge. Methods to measure the impact of knowledge organizations have not been well developed to date. CPAC is trialing a method to systematically evaluate its organizational strategy. A common framework that integrates target audience, objectives, knowledge and methods into the design and planning of KTE and a consistent approach to evaluation of KTE activities has been introduced. CPAC measures performance to demonstrate that its programs and initiatives are achieving the cancer strategy's immediate (2017) outcomes and laying the foundation for achieving the intermediate (2027) and ultimate (2037) outcomes. To gauge progress against longer-term outcomes, CPAC developed a multiple-methods design for KTE monitoring and evaluation. Informed by a review of KTE evaluation theories, and incorporating results from thirteen program evaluations, this includes a standard tool to provide quantitative feedback on the delivery and uptake of KTE activities. Specific indicators include measures of participants' understanding of and role in advancing the objectives of the KTE activity; usefulness of the knowledge disseminated; quality of exchange during the KTE activity; and intent to use the knowledge. Results examined on a quarterly basis as part of routine performance monitoring enables adjustments in the approach as needed. CPAC measures and tracks progress of its initiatives and programs, the collaborative approach to implementing the national cancer control strategy, and the broader cancer control system. The KTE framework will help evaluate effectiveness of KTE design, delivery/exchange and uptake for programs and activities across the strategy, thus allowing routine assessment of progress towards longer-term outcomes on a routine basis.

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37 Determinants of changes in EQ-5D utility scores among participants in a randomized controlled trial of housing for homeless adults with mental illness**ANDREW PINTO**, Physician, Postdoctoral Fellow, St. Michael's Hospital

Health economists often measure health-related quality of life using utilities, summary measures that reflect preferences for outcomes. We evaluated longitudinal changes in the EQ-5D, a commonly used community-based utility instrument, among Toronto participants of a randomized controlled trial of housing and social supports for adults with mental illness. We used data from the At Home/Chez Soi study. Participants who had moderate needs were randomized to treatment as usual (n=174) or housing first and intensive case management (n 4); high-needs participants were randomized to treatment as usual (n=100) or housing-first and assertive community treatment (n = 97). The EQ-5D was measured at baseline, 6, 12, 18 and 24 months and scored using Canadian-specific index values (maximum score=100). We analyzed changes over time using multilevel mixed-effects linear regression and stratified by need. We treated subject and time as random effects and treatment assignment, age, gender and ethnoracial identity as fixed effects. For moderate and high needs groups, the respective baseline median (inter-quartile range) EQ-5D scores were 66 (52 to 82) and 71 (48 to 62); scores were complete for 66% and 57% of participants. We observed no treatment by time interaction for moderate (p=0.46) or high needs (p=0.72) groups. Among the moderate needs group, we observed effects of time (0.41 units/month, 95 Confidence Interval [95CI] 0.31 to 0.50), baseline age (-0.25 units/year, 95CI -0.39 to -0.11), and ethnicity (3.9 units, 95CI 0.54 to 7.3 for non-white participants). Among the high needs group, we observed effects of time (0.35 units/month, 95CI 0.20 to 0.50) and ethnicity (5.6 units, 95CI 0.06 to 10.6 for non-white participants). Gender was not a determinant of EQ-5D scores. Interventions for homeless adults did not improve EQ-5D utility scores. Why scores were higher for ethnoracial groups merits further research. Time effects on EQ-5D scores likely reflects regression to the mean. The EQ-5D is a potentially useful measure for assessing health benefits in this population from a health economics perspective.

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17 Developing a Person-Centred Electronic Patient-Reported Outcome Tool: Findings from focus groups with patients**CAROLYN GRAY**, Post-doctoral fellow, Bridgepoint Collaboratory for Research and Innovation

Determine what aspects of care are most important to patients with complex care needs (multi-morbidities) to support the development of a Person-Centered Electronic Patient-Reported Outcome (PC-EPRO) tool. The PC-EPRO is intended to help support the health care needs of patients with complex care needs in a primary care setting. A Design Evaluation Approach is used to ensure the tool captures aspects of primary care delivery that are most important to patients with complex care needs. The initial design phase involved focus groups with patients with complex care needs and their caregivers. Patients were recruited through a Family Health Team based in the east end of Toronto. Four focus groups were conducted with fourteen individuals. Focus groups were audio recorded and transcribed. Transcriptions were thematically double-coded by two researchers. Patients and caregivers identified several areas of importance with regard to the health care services they receive. They identified the need for: 1) improved two-way communication between themselves and their primary care, and other, providers; 2) improved information sharing between providers to help manage their multiple chronic issues; 3) better access to services when needed; and, 4) better symptom management, particularly around pain and mobility. When presented with examples of electronic tools participants saw significant potential for these tools to address the challenges they face in managing their care and health day to day. However, participants were also concerned that these types of tools could be costly and take the place of necessary face to face visits with providers. Several key domains were identified by participants including: communication, information sharing, symptom management, and medication management. These findings will be used to inform the next phases of the design of the PC-EPRO tool

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30 Dietitians and Community Mental Health: Setting the Research Agenda**SCOTT MITCHELL**, Director, Knowledge Transfer, Canadian Mental Health Association, Ontario

The goal of the Dietitians and Community Mental Health project is to identify and prioritize key areas of research needed to advance healthcare policy and practice, improve access to dietetic services for people living with mental illness, and evaluate the impact and outcomes of community-based healthy eating programs. With guidance from an expert advisory committee, the project partners (Canadian Mental Health Association, Dietitians of Canada, and University of British Columbia) worked collaboratively to engage a broad array of stakeholders, including people with lived experience of mental illness, mental health service providers, dietitians and dietetic educators, and policymakers. All stakeholders were invited to complete an online survey to identify areas where investments in research could most improve nutrition practice in community mental health. Key informant interviews were conducted, followed by a face-to-face workshop to review findings and recommend a research agenda based on well-recognized priority-setting criteria. The survey was available online for five weeks, and was also available in a PDF format that could be downloaded and printed by service providers, to enable responses from clients without computer or Internet access. A total of 811 responses were received, with good representation across most locations and target groups. Nine key informant interviews were completed. The face-to-face workshop and final priority-setting had not been completed as of the abstract submission date. Research recommendations emerging from the face-to-face workshop (scheduled for February 10, 2014) will be published in a final report and presented in summary format at the CAHSPR conference. Lessons learned about stakeholder engagement and the research priority-setting process will also be shared.

13 Discharge Planning with Older Adults: The Influence of Social and Political Systems and Contexts**EVELYNE DUROCHER**, Post-Doctoral Fellow, McGill University

Returning home or moving after hospital discharge can have tremendous implications for older adults and families. In light of many competing demands and agendas, it can be unclear what is driving discharge-planning processes and outcomes. The research objectives were to 1) explore individual perspectives on discharge planning; 2) examine the influence of underlying beliefs and conventional processes on perspectives, behaviours and practices in discharge-planning. Using a microethnographic case study method, data were generated from five case studies in older adult inpatient rehabilitation. Each case study consisted of the observation of the discharge planning family conference and semi-structured interviews with an older adult facing discharge, one or more involved family members and between one or more healthcare professionals assisting with discharge. Taking a critical bioethics perspective and using relational autonomy theory, this research examined how social and political contexts shaped discharge-planning policies, processes and outcomes. Discharge planning is a complex process in which intersections of competing norms, demands and expectations often beget ethical challenges. Institutional concerns with patient safety and expedience can overshadow healthcare professionals' commitments to client-centred approaches. Discourses of aging-as-decline, beliefs privileging healthcare professionals' expertise and conventions guiding discharge planning marginalized older adults. The prioritization of safety and focus on discharge superseded approaches to maximize function: the stated aim of rehabilitation. A profession-centric approach and the focus on safety and discharge from the time of admission intersected to promote 24-hour care recommendations in all cases, which may not have been required and may not be meeting the needs of older adults, their families, or the healthcare systems that serve them. The findings revealed that discharge planning was driven by paternalistic norms and that older adults' 'best interests' were aligned with 'protecting physical safety' at the expense of other considerations, thereby marginalizing older adults and impeding client-centred practice. Suggestions are made to promote practices that uphold older adults' agency and align professional responsibilities with intended program aims.

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6 Does improving services availability in primary care clinic result in better patient assessment of accessibility?

CHRISTINE BEAULIEU, Research coordinator, St.Mary's Research Centre

The new primary care model in Quebec, the Family Medicine Group (FMG), is designed to improve accessibility and coordination of care. FMGs are required to provide extended opening hours and urgent care services. We compared clinic service availability with patient assessments of accessibility to care in primary care clinics. A total of 1029 patients were recruited in 12 primary healthcare clinics in 2010, in three regions of Québec participating in our study. Adults aged 25 to 75 years responded to a self-administered questionnaire referring to their own experience as a patient on many healthcare dimensions, including accessibility, in the last 12 months. During the same period, clinic managers or directors of the 12 clinics completed a questionnaire about services offered in their clinic, including accessibility structures and processes. Multi-level regression modelling was used to investigate the link between patients' perception of accessibility and clinic reports of service availability. We had hypothesized that perceived access would be higher in FMGs due to requirements for greater service availability. Perceived accessibility varied by clinic, but not- as expected- by the type of clinic (Private, community-health, FMG). There was no statistically significant correlation between clinic-reported access structures, like expanded opening hours and patient assessments of accessibility ($r=3D-0.1$, $p=3D0.67$). Our multi-level regression model shows that a positive evaluation of accessibility by patients was most strongly predicted by the usual length of clinic visits, explaining 25% of clinic-level variance. Patients report higher accessibility in clinics with a policy of longer visits regardless of the reported service availability. Written comments by patients suggest that accessibility means having time to address care needs not just encountering a health professional. Despite FMGs extended hours and greater service availability, these features do not necessarily translate into increased accessibility as perceived by patients. Fulfillment of mandatory requirements may not be accompanied by a change in accessibility culture. Patients' perception provides insights on what really matters most for them in terms of accessibility.

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42 Does interdisciplinary teamwork improve cancer patients' perceptions of their care experience? Results of a Quebec's Oncology Clinics Survey

DANIÈLE ROBERGE, Professeur associé, Université de Sherbrooke (Campus Longueuil)

Interdisciplinary teamwork (ID) has been advocated in a number of forums for improving the quality of primary care and specialized care but there is limited empirical evidence supporting it. The objective of the study is to evaluate the effects of ID on cancer patients' perceived experience of care. Data were collected in 2010-11 in 15% of Quebec's oncology outpatient clinics. Sites ($n=3D9$) were purposely selected on the basis of the intensity level of ID (higher, lower). The sample included 1379 adult cancer patients (response rate 80%). Perceived experience of care was documented by means of a self-administered questionnaire divided into six validated sub-scales: timeliness of services (TIM), communication (COM), patient-centered care (PCC), quality of physical environment (QPE), continuity (CONT) and results of care (RES). Multiple logistic regression models were used to estimate the extent to which patients' ratings of their care experience differed between levels of ID. Patients who were treated in clinics where the ID level is high were 3.99 times (95% CI: 1.89-8.41) more likely to rate positively TIM and also more likely to have a favorable opinion of COM (OR: 2.37; 95% CI: 1.25-5.45), of PCC (OR: 2.11; 95% CI: 1.05-4.24) and of CONT (OR: 2.18; 95% CI: 1.07-4.47). Patients' perception of QPE and RES were not related to the level of ID teamwork. Various patients' characteristics (age, level of education, perceived health status) and organizational attributes (team mandate with regard to oncology services, geographic location, team size) were associated with patients' ratings of their care experience. As most cancer programs are introducing ID as a key modality, our results suggest that ID teamwork can improve various aspects of cancer patients' care experience. Significant challenges remain in order to draw clear conclusions about the key elements of ID and its benefits and they will be discussed.

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12 Does One Program Look Like The Other? A systematic review of practices to measure fidelity to early psychosis intervention standards

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Ontario Ministry of Health and Long-Term Care released in 2011 the Standards for Early Psychosis Intervention (EPI). To support EPI programs meeting standards, a systematic evidence review was completed to answer: what are the approaches and indicators used in EPI programs (around the world) to measure fidelity to EPI standards? Medline, PsychINFO, CINAHL, Scopus and Embase databases. Eligibility criteria for fidelity assessment studies were developed a priori and applied by all authors. Decisions were made by consensus. A quality assessment tool was developed based on the literature about fidelity scales; fidelity measures were rated across 5 categories, each with criteria developed for 3 levels of adherence (nominal, partial, full). All included studies were independently rated using the quality assessment tool by two authors (CC, AS). Consensus involving a third author (JD) was used to finalize quality ratings. The search found 390 articles: 43 were duplicates, 330 were excluded as ineligible. A final sample of 17 studies was included. Publication years were between 2004 and 2012, with 76% focusing on entire EPI programs, 6% focusing on CBT, 12% on physical health monitoring, and 6% on pharmacotherapy. Overall, fidelity measurement tools were most likely to reach full adherence related to scope (i.e., including both structural and service delivery indicators); had partial adherence in data collection (i.e., by observation or audit versus self-report), and had nominal adherence in tool development, and in testing psychometric properties of the tool. The provincial network of EPI programs, researchers and provincial decision-makers are collaborating to ensure that provincial EPI programs follow the Standards. While some studies met criteria for full adherence in some categories assessed, they were all missing important elements. EPI is a complex intervention; studies in this review did not agree on essential elements of EPI to measure. The EPI Standards Implementation Steering Committee aims to improve fidelity to the Standards.

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7 Electronic personal health records in Canada: priority issues for implementation

ERIK BRETON, Research associate, Centre de recherche du CHU de Québec

To explore the priority issues of key stakeholders associated with the implementation of electronic personal health records (ePHR) in Canada. 30 interviews (26 individual and 3 with two participants each) were conducted between October 7 and November 27, 2013. The 32 participants represented five stakeholder groups (patients, healthcare professionals, provincial government, independent health agencies and ePHR administrators) and 13 organisations from 7 Canadian provinces. We carried out data analysis with the support of NVivo 9 according to the methods described by Miles and Huberman, which enabled us to identify themes and relationships between themes in the interviews through the construction of matrices. According to results, the main potential benefits of using an ePHR for patients were better access to information, control and monitoring their health data, and empowerment. Some concerns identified were related to confidentiality issues, risk to safety and mistrust from doctor to the information controlled by patient. Factors that could influence ePHR adoption were physicians and patients' expectations, efficiency (easy to use) and security of ePHR, information sharing between patients and physicians, and individual factors (age, health and/or computer literacy). Legal factors that may influence the use or implementation of ePHR concern the confidentiality of patient health data, privacy and information sharing between patients and physicians. Governmental policies could address several issues on ePHR (privacy, confidentiality, investments, oversight). These interviews are part of an iterative approach that will inform an online consultation with stakeholder groups in order to prioritize policy issues to address in order to guide the implementation of ePHR in Canada.

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28 Engagement of Patients and Families on Hospital Unit Action Councils**KRISTINA MILLER**, PhD Student, Western University

The main objectives of this project were to engage and empower patients, their families and hospital staff in Unit Action Councils to address quality of care issues and explore strategies to enhance their care, and to establish sustainable models of patient/family/health provider engagement to influence collaborative team practice. This project occurred within a largely rural hospital alliance in southwestern Ontario. A series of Unit Action Councils were implemented across units and hospital sites, with an intervention/control group comparison in which almost half of UACs included a patient and a family member of another patient with health care providers and the remaining half included only the healthcare providers. Data were collected from focus groups before and after the implementation of the UACs with health care professionals, patients and family members from various units that had UACs across the alliance. Members of the UACs valued the work of these groups and saw them as a means to gain their voice in the decision making processes within the hospital alliance. At the same time, while some staff acknowledged and valued the work of the UACs, others were unaware. Therefore improvements are necessary in how UACs engage the staff, patients and families of their respective units. The impact of UACs on the perception of staff having a voice was a consistently reported perception. In most UACs, the work achieved lacked sufficient time to impact on the quality of care viewed by the patients and their family members interviewed and follow-up evaluation is needed to gain insight into the sustainability and impact on the quality of care. Based on the results of this project, patient and family engagement will be expanded to now include them as key members on all of the UACs, and other hospital alliance committees and care teams, thus providing staff, patients and families a voice and means to bring about positive results.

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1 Engaging relevant publics in Ontario's health technology assessment process: A qualitative policy analysis**JULIA ABELSON**, Professor, McMaster University

We explore the 'policy problem' of how to engage relevant publics in the evidence-based and value-laden arena of health technology assessment (HTA) and its related policy decisions. Results from a qualitative policy analysis will be shared along with preliminary insights about comprehensive public engagement (PE) approaches for Ontario's HTA community and other relevant organizations. Our findings are drawn from three data sources: (1) a website scan of 53 international HTA agencies to identify state-of-the-art PE strategies and documented experiences; (2) a synthesis of published and grey literature reviews, empirical studies and conceptual analyses of PE related to health technology decision making; and (3) in-depth interviews with members of the Ontario Health Technology Advisory Committee (OHTAC) and the Evidence Development and Standards (EDS) team at Health Quality Ontario about perceived opportunities for, barriers to and influences of public engagement (PE) in Ontario's HTA process. Website scan results reveal little documented PE activity. Less than half (n) of the websites reviewed (n=53) referred explicitly to some type of PE activity. A smaller number elaborated on goals and rationales for these activities. Some organizations approach public engagement through public representation on boards and committees (n=8), emphasizing patient and user group perspectives. Others pursued more passive approaches such as seeking 'public comment' on draft documents (n=7). A key theme in the literature reviewed to date is that 'what is missing is a more transparent and structured evaluation of what works, what does not, and the value that it can bring'. Variations in the underlying rationales for PE are also noted - a theme also emerging from the initial round of interviews. Despite expectations held by some for public engagement to take hold within HTA organizations, there are considerable challenges to determining how to involve relevant publics in increasingly complex HTA processes. Key insights from this policy analysis will inform HTA decision makers in Ontario and beyond about how best to proceed.

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34 Frequency of Nurse Consultations for Weight Management Within a Primary Care Network**AYODELE OGUNLEYE**, PhD., University of Alberta

Obesity is a common problem in primary care. Registered nurses can play an important role in chronic disease management. The goal of the present study was to assess the frequency of nurse consultations for weight management within a large primary care network (PCN). As part of the evaluation and implementation of a multidisciplinary program to improve obesity management (5As of Obesity Management Team (5AsT) Intervention) we assessed the frequency of weight management consultations with registered nurses across a large PCN in Edmonton, Alberta. Twenty-five network clinics that had primary care nurses attached to them prior to study date were included in this analysis. Weight management consultations during a period of 12 months (March 2012 to April 2013) were identified through database analyses of patient encounter forms, completed by nurses indicating 'weight management' as the primary reason for the visit. Frequency of visits were normalized by nurse full-time equivalents (FTE) and linear regression analysis was used to assess the association between weight management visits and practice size. Of the 67 clinics within the PCN, 25 clinics included in 5AsT intervention had primary care nurses attached to them. These clinics, representing a total panel size of 155,983 patients (range 1,834 to 13,640 per clinic), reported a total of 1,917 (range: 0 to 400)-weight management or 52 median visits per clinic (Interquartile Range (IQR) 66.5). The adjusted median frequency of visits per nurse FTE was 67 (IQR 83.44). The frequency of weight management visits per FTE was not related to practice size ($P>0.05$). Only a minute proportion of PCN patients (about 1.2%) were documented to have attended weight management consultations with registered nurses within a year. Frequency of these encounters appear unrelated to practice or panel size. Further research to determine the barriers to addressing weight management in primary care appear warranted.

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45 Hospital Admission Risk Prediction (HARP)**ANGUS STEELE**, Senior Advisor, Health Quality Ontario

The partners set out to design a predictive risk model to identify an individual patient's near and longer-term risk of future hospitalization. Two time frames of risk were chosen: 30 days and 15 months. The model would generate a patient risk score and could be integrated into clinical information systems. A multiple regression analysis was undertaken to identify variables for inclusion in the predictive risk models by determining the relative strength of association between admission and other patient variables. The partners and experts selected variables for inclusion in the analysis based on data availability, lessons from other existing models, and available evidence. The HARP algorithms were derived and validated using a split sample design. The study population (382,948 adult acute medical patients) was split in two parts using random assignment: the derivation dataset (191,321 patients) and the validation dataset (191,627 patients). Model calibration and predictive validity statistics were calculated. The variables most predictive of future hospitalization were: patient age, number of admissions and emergency department (ED) visits in the past six months, location discharged to, intensity of previous admission, presence of one of 18 top conditions, whether an admission was through the ED, the Charlson co-morbidity index, occurrence of paracentesis, and previous length of stay. HARP weights these factors according to relative predictive power. The algorithms were found to be highly concordant in the validation sample. A simplified model was also developed as a strong substitute for use in community care settings with limited access to acute data. The work showed that, after accounting for clinical variables, community characteristics are not predictive of an individual's risk of future hospitalization. HARP can help providers identify which patients are at higher risk of readmission. The algorithms are publicly available for providers who wish to integrate HARP into clinical practice settings to evaluate its utility. Validation in a second province indicates that HARP could be used across Canada.

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11 Hospital-associated costs of chronic pelvic pain in Canada**INNIE CHEN**, Assistant Professor, University of Ottawa

To determine the hospital-related costs associated with women requiring surgery or inpatient admission for chronic pelvic pain in Canada. In this population-based, cross-sectional study, women ages 15-59 with a most responsible International Classification of Diseases diagnosis of pelvic and perineal pain, dysmenorrhea, or dyspareunia who had surgery or inpatient admission with a discharge date between April 1, 2008 and March 31, 2013 were identified using the Canadian Institutes for Health Information Discharge Abstract database. Clinical diagnoses and interventions and relative intensity weighting (RIW) were extracted. Surgical interventions were categorized as hysterectomy, adnexal surgery, laparoscopy or other. Cost per weighted case (CPWC) was used to determine costs. Over five years, there were 42,273 cases of surgery or inpatient admission for chronic pelvic pain amounting to \$122,958,045. Cost for pelvic and perineal pain was \$66,546,465 (26,085 cases); cost for dysmenorrhea was \$50,568,978 (13,412 cases); and, cost dyspareunia was \$5,842,602 (2,776 cases). 38,595 (91.3%) cases were associated with surgical intervention, with the most common surgeries being hysterectomy (19,903 cases, 47.1%), laparoscopy (10,775 cases, 25.5%), adnexal surgery (2,979 cases, 7.0%), and other procedures (4,938 cases, 11.7%). The annual cost of chronic pelvic pain ranged from \$22,455,176 to 25,913,131 with the five year mean being \$24,591,609. While these estimates do not take into account non-hospital related costs, such as outpatient treatment, loss of productivity, and impact on quality of life, this study on hospital-related costs demonstrates that chronic pelvic pain represents a considerable economic burden to Canadian society.

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29 How do citizens balance the benefit and burdens of newborn screening? A choice experiment**FIONA MILLER**, Associate Professor, University of Toronto

Newborn screening (NBS) programs have expanded in recent years, with debate about the appropriate balance between benefits and burdens. How the public values and trades-off the effects of NBS, including those impacting affected infants and families and those imposed on the full population, can influence NBS policy and uptake. In January 2013, a bilingual (French, English) Internet survey was administered to a representative sample of Canadians to assess preferences for NBS across 5 attributes using a discrete choice experiment (DCE). Introduced through a detailed training module, the attributes included: clinical benefits of improved health (none, moderate, significant), earlier time to diagnosis (1 week to 4 years), reproductive risk information (available, not), false positive (FP) results (1-40 FP results per affected baby), and overdiagnosed (OD; ie. mild disease) infants (0-2 OD infants per affected baby). Data were analyzed with a mixed logit model to identify preference heterogeneity among respondents. The survey participation rate was 94%; 1213 completed responses met quality criteria (52% completion rate). Respondents prioritized clinical benefits overall, though harms (FP, OD) were the next most important attributes. All respondents positively valued reproductive risk information, but only 65% positively valued earlier diagnosis (35% negatively valued this effect). All respondents had a negative preference for FP results, and 98% negatively valued OD (2% positively valued this effect). Respondents were willing to accept large numbers of FP results and some OD infants to achieve moderate clinical benefit for one affected baby (33 FP, 2 OD), and higher numbers to achieve significant clinical benefit (49 FP, 3 OD). As expected, members of the public prioritized clinical benefits. Interestingly, the harms of screening were the next most important outcome. As well, non-clinical benefits were least important and many disvalued early knowledge. These findings suggest support for a cautious and evidence-informed approach to NBS policy, where clinical benefits outweigh harms.

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16 How research contributed to policy change**LOREEN GILMOUR**, Director, Poverty Initiatives and Research, United Way Calgary and Area

One social determinant of health is education and lack of a high school diploma is a risk factor. The objective was to increase the high school graduation rates amongst vulnerable youth using research to influence provincial government policy change. The mixed-method design included a literature review, six focus groups for 70 participants and a survey reaching over 400 vulnerable youth. The survey's aim was to include respondents who were not already attached to an agency. This hard to find group was reached through a methodology of sending survey teams to 40 low income communities and learning through agencies where 18-25 years 'hang-out'. Surveys were administered by trained teams of university students. The results were then taken to several advisory boards and implementable recommendations were developed with the stakeholders. The research was presented with all stakeholders in attendance. The research report was released at a media event with over 100 people from government and youth serving agencies in attendance. The results were reported on the front page of the largest daily paper and coverage was provided by several radio and TV stations. We began a series of letters, discussions and presentations with various provincial level bureaucrats and politicians to educate and advocate for two specific changes to the Education Act. The changes were to increase public funding for high school to age 21 from 19 and to increase the age of mandatory school attendance to 17 from 16. The Education Act was passed in Nov, 2012 with the recommended changes included. This policy change was influenced by robust research which identified the need and the solution. Tenacity and tailoring the message is key when working with government.

39 Impact of Community Pharmacist Interventions in Hypertension Management on Patient Outcomes: A Randomized Controlled Trial**NEDZAD POJSKIC**, Manager, Health Policy, Ontario Pharmacists Association

There is a growing recognition that pharmacists can play a key role in the management of chronic diseases in the community setting. The primary objective of this study was to examine the impact of Ontario pharmacists' interventions in hypertension management on patient health outcomes. This study consisted of a 6-month, prospective, randomized controlled trial conducted in 38 community pharmacies from four regions in Ontario. The pharmacies were randomly allocated to the intervention or control group in a 1:1 ratio. One hundred and fifty-three patients who were Green Shield Canada drug plan recipients and had uncontrolled hypertension were recruited for this study. They met with their pharmacist on a monthly basis for a total of 7 times during the study period. Intervention group pharmacists provided patients with a comprehensive disease management program for hypertension, while control group pharmacists provided standard dispensing services. One hundred and eighteen patients completed the study, majority (79) of whom were in the intervention group. Systolic blood pressure declined by 13.5mm Hg in the intervention group compared to 5mm Hg in the control group ($p<0.001$). The proportion of patients with overall blood pressure control increased by 56.5% in the intervention group, compared to only 17.5% in the control group ($p<0.001$). Self-reported adherence to medication therapy increased by 15% in the intervention group compared to only 2.2% in the control group, a difference that approached statistical significance ($p=0.08$). The overall cost of antihypertensive medication therapy declined by 31.2% in the intervention and only 5.2% in the control group ($p=0.055$). Patients reported a uniformly high level of satisfaction with pharmacist services, particularly the lifestyle counseling component. A community pharmacist-led hypertension management program improved patient blood pressure and adherence to medication therapy and substantially reduced the overall cost of antihypertensive drug therapy. Provincial governments may want to consider implementing targeted, pharmacist-led chronic disease management programs to improve health outcomes and manage drug expenditures.

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5 Implementing an Electronic Medical Record (EMR)-supported End-of-Life (EOL) Care Module for Primary Care Physicians**JESDEEP BASSI**, Research Coordinator/Analyst, University of Victoria

This knowledge translation project aims to answer the question 'can the palliative approach that is integrated into the EMR of primary care physicians enhance EOL care in ways that are measurable, scalable, and sustainable?' by developing an EMR-integrated EOL Care Module based on best practices. This presentation will discuss the current status. This project has four stages. Stage 1 involves a small number of primary care practices to determine their use of current EOL care tools and gather input for EMR-supported tools. Stage 2 involves developing the EMR EOL Care Module for selected EMRs with feedback from physicians and medical office assistants. Stage 3 involves disseminating the EMR EOL Care Module widely. Lastly, Stage 4 consists of a time-series evaluation study involving providers, patients, and family members to assess the impact of the EMR EOL Care Module over time. Research methods include individual interviews, workflow inspections, EOL indicator worksheets, surveys and focus groups. At this time, Stage 1 is complete and Stage 2 is in progress. Five physicians and two medical office assistants participated in Stages 1 and 2. All practices had EMRs for at least five years and were group or multispecialty practices. Some templates or forms for certain aspects of EOL care do exist in EMRs but use depends on physician knowledge rather than guided EOL best practices in British Columbia. Some challenges mentioned that are being addressed in the module design include organization of EOL tools and resources and lack of smooth integration or interoperability. In Stage 3 we will be holding dissemination sessions to share the module and collecting data to assess its impact after implementation in Stage 4. The current findings from the small group of participants in Stage 1 suggest some EOL tools are available in EMRs but don't generally support the user in best practice workflows. The EMR EOL Care Module has the potential to fill this gap, which will be evaluated in Stage 4.

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33 Integrated primary prevention and chronic disease management models of care: Are they feasible?**NELLY OELKE**, Assistant Professor, University of British Columbia, Okanagan

Chronic disease is a significant issue in Canada and most healthcare services focus on disease management as opposed to primary prevention. The aim of this study was to better understand how primary prevention can be successfully integrated into chronic disease management (CDM) models of care. This exploratory study used qualitative methods for data collection and analysis. Data was gathered in south central British Columbia representing urban, rural, and remote communities. Data were collected via a literature review, interviews with stakeholders (providers, decision-makers in the health authority and community-based organizations), environmental scan to look at successful integrated models of care identified in the literature and by interview participants, and focus groups with community members. A thematic analysis was conducted of the different components of the data and once all data were analyzed a final round of analysis was conducted to identify overarching themes for the study. Seventeen articles were reviewed, 19 stakeholders interviewed, 3 focus groups conducted, and 4 environmental scan interviews were completed. Results showed there was a lack of focus on primary prevention to address chronic disease, prevention was not well integrated with CDM, and there was a lack of partnership between organizations and stakeholders. Challenges included lack of communication between organizations/sectors, limited capacity of organizations and staff, funding and funding models, and a lack of outcomes measurement. Recommendations from participants and the literature were identified. Partnership was absolutely necessary along with community engagement. All levels of government should be involved and a comprehensive plan with multiple strategies would be required. Above all, participants stated new and innovative strategies were required to address both primary prevention and CDM. CDM and primary prevention are currently not well integrated in health service delivery models. Whether such a model could be developed and implemented remains elusive. Even so, there is room for building stronger linkages between these two components of care focusing on chronic disease.

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49 Introducing an Evidence-Informed Online Toolkit on Public Health and Primary Care Collaboration!**RUTA VALAITIS**, Dorothy C. Hall Chair in Primary Health Care Nursing, McMaster University

This interactive poster presents the background and process of development of a free, online, evidence-based, bilingual toolkit on public health (PH) and primary care (PC) collaboration. Objectives are: 1. To build knowledge capacity through increasing understanding of the intrapersonal, interpersonal, organizational, and systemic factors that influence successful collaborations. 2. To offer 'hands-on' experience of navigating the new web-based toolkit that features an ecological framework. A participatory design approach and ongoing evaluation was employed during the developmental phase. Consultations were sought from students, as well as, the professional advisory team representatives from practice, policy, and education. User testing of the beta version of the toolkit was conducted in the formative evaluation phase using a think aloud technique. Summative evaluation will be conducted at the completion of the project. Results from a 4.5 year program of study, including a scoping literature review, three provincial environmental scans, 10 in-depth case studies conducted in 3 provinces, interviews with over 70 key informants from across Canada, and an Q-methodology study, provided a rich database of information for the toolkit's content. Based on the culmination of this research, an ecological framework was developed which includes: a) the nature of collaboration, b) intrapersonal, interpersonal, organizational, and systemic level factors influencing collaboration and, c) evaluation research that explores the process and impact of collaborations. The Public Health and Primary Care Collaboration Toolkit aims to reach bilingual (English and French) audiences beyond the PH and PC sectors. Although focused on a PH - PC Canadian audience, the toolkit product has universal application. This poster session will provide an opportunity for 'hands on' experience with the English version of our evidence-informed Online Toolkit on Public Health and Primary Care Collaboration!

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51 Introducing Physician Assistants Into the Ontario Healthcare Workforce: Health Reform Analysis**MEREDITH VANSTONE**, Assistant Professor, McMaster University

Although physician assistants (PAs) are well established in the United States and in the Canadian Forces, the PA is a new health profession in Ontario civilian health care. This policy analysis traces the introduction of the PA profession to Ontario, highlighting the opportunities and challenges of its integration. Using Kingdon's Multiple Streams Framework, we trace how the physician assistant came to be positioned as a solution to Ontario's health human resources struggles in the early 2000's. We focus on the way in which PAs were introduced in 2006 and how they have been implemented, in order to identify and examine the factors that may lead to the ultimate success or failure of this health reform. Our data sources include published literature, organization documents (both PA and employers), provincial government announcements and policy documents, and publicly available communication between relevant stakeholders. The integration of physician assistants to Ontario is a health reform that has yet to succeed or fail, leaving PAs with an uncertain future. This analysis suggests that the successful integration of PAs requires the co-operation and collaboration of many types of stakeholders, in order for this profession to contribute to resolving health human resources problems. In Ontario this has not yet been achieved, and the Ministry of Health and Long Term Care continues to financially support many PA positions. Existing Ministry funding is temporary for most positions and employers have been encouraged to prepare to find resources to continue to support the PAs in their facilities. Many employers are reluctant to commit financial resources to employ PAs, in part because there is very little Canadian evidence available about their effectiveness. The introduction and integration of physician assistants in Ontario is an interesting example of a health reform that has significant support of the Ministry of Health and Long Term Care, but has yet to become self-sustaining.

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14 MAAP-NS: Models and Access Atlas of Primary Care Providers in Nova Scotia: Preliminary findings of a population study**EMILY GARD MARSHALL**, Assistant Professor, Dalhousie Family Medicine

The objective of the MAAP-NS study is to create a the first population database, or 'atlas', of all family physicians and primary care nurse practitioners in Nova Scotia (NS), that includes models of care, scope of practice, provider characteristics and, most importantly, accessibility to their services, from the perspective of both the practice and through patient experience. Using creative methods to maximize response rates, data are being collected via working-hours and after-hours telephone surveys to all providers' offices in NS to augment information available through the College of Physicians and Surgeons website. This will be followed by a fax survey to all family physicians and primary care nurse practitioners in NS. Telephone survey data collection of providers as well as the experience of patients in trying to access providers will be complete in January 2014. From the MAAP-NS study we will report how many family physicians and primary care nurse practitioners are providing services in NS, their key characteristics such as location, age, gender, scope of practice and models of care (solo, group or inter-professional practices or networks, and electronic medical record functionality). We will also report on several indicators related to accessibility of primary care services including: accepting new patients and under what conditions; any 'meet and greet' requirement for new patients; one-problem-per-visit policies; next available urgent and non-urgent appointments; and open access model-prevalence. MAAP-NS will be used to identify areas of primary healthcare that require enhancement, where gaps exists in accessibility, provide a baseline for evaluating future innovations, and create new knowledge of the current landscape of primary healthcare access, models of care being offered and their impacts on utilization. Once completed, MAAP-NS will allow for innovative interprovincial comparisons with contextually specific differences on how an incremental approach to primary health care renewal (NS) compares to other approaches across the country. Future work that has been funded will link the MAAP-NS database to administrative healthcare database.

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55 Measuring the Scientific Impact of Canadian Health Services Research Institutes: An Example of Developing and Implementing a Framework at the Institute for Clinical Evaluative Sciences (ICES)**ERIKA YATES**, Project Manager, Institute for Clinical Evaluative Sciences (ICES)

Demonstrating the impact of health research-health services research in particular-is increasingly important. We sought to develop and implement a framework to measure the scientific performance of the Institute for Clinical Evaluative Sciences (ICES) between 2008/09 and 2012/13 in order to increase accountability and develop common metrics for comparison. The evaluation was based on a pre-specified framework composed of six domains: research capacity, knowledge generation, knowledge translation, impact on policy/practice, health/social sector impacts, and broader societal/economic impacts. A mixed methods approach was used to collect data for indicators across the domains including: annual activity reporting by scientists; a survey of stakeholders/decision makers; bibliometric analysis of publications; targeted interviews; and corporate information on personnel, data holdings, funding capacity, grant submissions, and media activity. Indicators related to research capacity and knowledge generation were easiest to populate including the numbers of active projects, manuscripts published, and grant success rates. These metrics were compared over time and relative to the number of active scientists. Indicators related to knowledge translation and impact on policy/practice were more challenging to collect. While the increasing media exposure and uptake was readily documented, the response rate for the survey of stakeholders was low. Interviews revealed that much of the research output informed policy, but often as background evidence. In addition, influence of research on policy often occurs over multiple years-this impact was not sufficiently addressed with the aforementioned data collection tools. Sector and societal impacts were deemed too challenging to approach at this time. This process stimulated rich discussion regarding the scientific direction of ICES, as well as the value of conducting this kind of performance measurement activity. However, the paucity of comparative data underscores the opportunity for collaboration across Canada to develop standard metrics on the impact of health services research.

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41 National Veterans Project: Project Management and Evaluation**MICHELE REID**, Manager, Homeless Prevention, City of London

This multi-site pilot study examines the importance of key principles for addressing homelessness among Canadian Force veterans, including; housing with support, peer support, provision of services separate from the general shelter/homeless population, promoting self-respect, providing structure, addressing co-occurring issues including addiction, mental illness, trauma and providing a transition process to housing. Local community organizations across 4 Canadian sites (Calgary, London, Toronto and Victoria) are collaborating with federal partners including HRSDC and Veterans Affairs Canada to provide housing and related support to veterans experiencing homelessness. Housing First to support long-term housing solutions remains a central goal. Evaluation of this project includes focus groups with veterans, staff, and stakeholders and structured interviews with veterans at multiple time points over the two-year funding. Focus group analysis reveals continued need for innovative strategies to engage veterans in housing related services. Strong agreement in the value of peer support for veterans is noted across sites. Creative, flexible approaches that balance safety, security and structure while at the same time promoting self-respect, personal choice, harm reduction and autonomy are essential to providing meaningful service to this population. Establishing strong interagency partnerships at the outset and strengthening pathways that promote information sharing and collaborative case management across sectors is also integral to reducing homelessness Care providers and policy decision makers across health, social service and housing sectors will benefit from improved understanding of the underlying processes that contribute to and ameliorate homelessness risk within this population; subsequently, interventions can be tailored accordingly to reduce risk and improve outcomes among Canadian Force

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26 New Drug Pipeline Monitor, 5th Edition**GREG MCCOMB**, Senior Economist, Patented Medicine Prices Review Board

The New Drug Pipeline Monitor (NDPM) is a publication that provides information on drugs currently under development that may have an impact on public drug plan expenditure in Canada. The report was prepared by the PMPRB for the National Prescription Drug Utilization Information System, a federal/provincial/territorial initiative that provides critical, comprehensive analysis of public drug plan reimbursement. Each report contains a list of pipeline drugs identified as part of a search of the BioPharm Insight® database; a specialized database that provides information on over 21,000 drugs in clinical trials. The search is supported by a review of pharmacy literature, with a focus on Canadian studies. Only drugs that meet a set of selection criteria are candidates for the NDPM. A decision tree algorithm was developed and applied consistently since 2006 and includes: the phase of development, the indication, the mechanism of action and the impact on clinical practice. Once a preliminary list is screened in, an effort is made to include pipeline drugs from a diverse set of therapeutic classes covered by public drug plans. In particular, consideration is given to high-cost drugs and classes where a new drug could have a financial impact, along with classes with a high utilization share of generic drugs. As this is the fifth edition of the NDPM, it updates the status of pipeline drugs identified in the four previous reports. For this edition, twelve drugs were added to the NDPM including two biologics, an emerging class of drugs. The biologics are Lebrikizumab, identified as the first biological treatment of asthma and Aflibercept, a treatment for macular degeneration of the eye. Three oncology drugs are in the final pipeline list: to treat breast and colorectal cancer and an add-on therapy to prevent cytotoxicity. Analysis in the report suggests the drug pipeline for biologics and cancer drugs continues to be strong, with numerous candidates identified in the latter stages of clinical development.

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35 Organizational factors associated with interprofessional collaboration in primary healthcare settings**KADIJA PERREAULT**, PT, PhD, Université Laval

Interprofessional collaboration is among the key factors when assessing primary healthcare quality. Our goal was to identify organizational factors associated with degree of collaboration between general practitioners (GPs) in primary healthcare organizations and other healthcare professionals. This was a cross-sectional survey of primary healthcare organizations in Québec's two most densely inhabited regions. One respondent from each organization, a physician or administrative manager, completed a questionnaire covering four organizational dimensions: vision, resources, structure and practices. We measured collaboration between GPs with 1) medical specialists working within (1a) or outside the building housing the GPs' primary healthcare organization (1b), and between 2) non-medical professionals working within (2a) or outside the GPs' clinic building (2b). Bivariate comparisons and logistic regression analyses were conducted for the four models with degree of collaboration categorized as high versus low. Data were collected for a total of 376 organizations. A high degree of collaboration between GPs and medical specialists located in the same building was associated with the following characteristics: GP referral within the clinic for patient education on chronic diseases, greater scope of services, public funding for clinic expenses and higher importance of patient care experience (1a). Collaboration with medical specialists outside the organization was associated with systematic management of patients with chronic conditions and fee-for-service remuneration of GPs (1b). Higher collaboration between GPs with other professionals, respectively from within or outside the building, was associated with a moderate amount of competence-related mechanisms or activities in place and a higher feeling of accountability towards colleagues/managers (2a) and higher importance of patient care experience (2b). Based on the findings of this study, degree of collaboration of GPs in primary healthcare organizations is associated with different organizational factors, depending on type of professionals involved and their proximity with the organization. Interventions aiming at increasing degree of collaboration should be adapted consequently.

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3 Patient Safety Indicators in Acute Care - Environmental Scan**HAYAT ALI**, Performance Measurement and Reporting Research Assistant, Acute Care, Health Quality Ontario

All hospitals in Ontario are mandated to publicly report on patient safety indicators related to Hospital Acquired Infections (HAI) and mortality. Our objective was to identify Canadian and international patient safety indicators in hospitals and to explore opportunities to revise and update currently reported patient safety indicators in Ontario. A structured search of PubMed/MEDLINE and Google Scholar was used to examine patient safety indicators in a hospital setting such as acute care, mental health and complex continuing care with an adult, older adult or pediatric population. Targeted searching of relevant organization websites was also conducted. Finally, our team also approached stakeholders to learn about emerging patient safety reporting initiatives in acute care. Our search resulted in the assessment of 110 patient safety indicators that are used in acute care settings in various organizations in Canada and internationally. The indicators were categorized into 17 general topic areas including medication safety (n=43 indicators), operative and post-operative complications (n=17), HAI (n=10 indicators), adverse events associated with acute myocardial infarction (n=10), other adverse events (n=8), mortality (n=5), adverse events in the emergency department (n=4) and procedure checklist or bundle compliance (n=3). Through stakeholder engagement, our team also determined that composite indicators are being developed in several countries, including England and Canada. Our review of patient safety initiatives, programs, standards-setting organizations, hospitals, facilities around the world were reviewed to assess their current patient safety indicators used to measure their health system performance. Several options for new patient safety indicators were discovered, to expand the scope of measuring patient safety in the acute care sector in Ontario.

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48 Planning surge capacity: An integrated framework for pandemic service and workforce planning**GAIL TOMBLIN MURPHY**, Professor, Dalhousie University

To demonstrate, at provincial and health authority levels, the application of a health systems planning approach to pandemic planning that integrates workforce and service planning across sectors and professions by allowing for the explicit and simultaneous consideration of best practice evidence, measures of population health needs, and health care competencies. An analytical framework was developed to integrate planning for health care services needed in a population with planning the health workforce required to provide those services. The framework was applied to the context of an influenza pandemic at the provincial (Nova Scotia) and health authority (Island Health) levels. Data were gathered from administrative sources, health provider surveys and interdisciplinary panels, and then analyzed using professions and then services at the unit of analysis to identify potential gaps between workforce supply and requirements. Decision-makers in both jurisdictions were engaged to discuss perceived strengths and limitations of the approach and its application. Analyses at the service and profession levels suggest that both jurisdictions have health workforces with sufficient training and numbers overall to provide most of the services that may be required by their populations under various potential pandemic scenarios. This is contingent, however, on the degree to which addressing other population health needs is deferred during the pandemic. Largest potential service gaps pertained to making diagnoses, providing a range of pharmacy services, and recommending appropriate in-home supports for patients. Some identified strengths of the approach identified by decision-makers were the explicit incorporation of measures of population health needs and its capacity to accommodate a wide range of supply and requirement scenarios. Its conceptual complexity relative to some other approaches was identified as a potential barrier to uptake. This approach offers a flexible tool to guide the alignment of scarce resources across sectors and professions as closely as possible with population health needs. The availability of such tools is particularly important during 'surges' in health care needs, such as pandemics.

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8 Potential disparities in services provided at the end of life: the influence of cause of death and location of care**FREDERICK BURGE**, Professor, Dalhousie University

To examine disparities in services provided to adults during the end of life by cause of death (cancer versus non-cancer) and to determine whether the location where the majority of care was provided during their last 30 days plays a role. Across Nova Scotia, 1316 death certificate identified informants (next-of-kin) of adults who died non-suddenly, between June 2009 and May 2011, completed a population-based telephone survey interview about the experience of care provided to the decedent. Based on a Canadian modification of the After-Death Bereaved Family Member Interview, additional questions asked about provincial services offered/received by the decedent. Services of interest were the offer/receipt of specialized palliative care; for those at home, the receipt of nursing care, homecare and family physician office or home visits. The effect of location of care on specialized palliative care and overall satisfaction (no concerns) is also examined. Cause of death: cancer, 38%; non-cancer, 62%. The majority of decedents with cancer received their care in the home (57%) whereas decedents due to non-cancer tended to be in long-term care (43%). Decedents with cancer were significantly more likely to be offered and then to receive specialized palliative care services than those dying of non-cancer; remained significant after controlling for location of care. Among those at home, a significantly greater proportion of those with cancer received provincially funded homecare services, nursing visits and family physician office and home visits. Although informants of cancer decedents reported greater satisfaction (no concerns) (47%) compared to non-cancer decedents (40%), this relationship was not maintained following adjustment for location of care. Results suggest significant differences in end-of-life services provided depending on cause of death. However, whether or not these represent service provision inequities cannot be assumed given the range of non-cancer causes of death and the potential for many confounding factors contributing in various ways to these disparities. Further exploration is required.

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20 Private Drug Plans in Canada, 2013**ELENA LUNGU**, Senior Economic Analyst, Patented Medicine Prices Review Board

This study provides insight into how the private drug plan market has evolved since 2005 in terms of its relative size to other market segments, cost pressures, high-cost beneficiaries, drug coverage and reimbursement. The analysis highlights regional differences in demographics, drug expenditures and drug pricing. A comparison with the public drug plan markets is also included, providing context to the demographic and plan design specificity of the two markets segments but also, the drug coverage, generic versus brand-name reimbursement and pricing, etc. The following three sources of data are used in this analysis: the IMS Brogan pharmacy retail database, the IMS Brogan private drug plan database and the NPDUIS database, Canadian Institute for Health Information. A cost driver analysis quantifies the most recent cost pressures in private drug plans. An analysis on drug coverage provides insight into the private payers open formularies and the extent of the overlap between the molecules reimbursed in public versus private. The generic market is also analyzed in terms of generic market share, the rate of generic substitution, as well as generic price differentials across the private and public provincial markets. A therapeutic analysis reveals differences in drug mix between private and public markets. The various plan sizes and the corresponding cost sharing structures are also examined for the private market. An analysis of the high-cost beneficiaries provides insight into how this patient group has expanded in recent years and how its therapeutic profile has evolved, including the use of biologics. This presentation will share the results and the conclusions of the PMPRB NPDUIS report Private Drug Plans in Canada, anticipated to be publicly released in July 2014.

19 Productivity of Primary Care Physicians in Ontario**MAUDE LABERGE**, PhD(c), University of Toronto

The present study explores factors that affect the productivity of primary care physicians in Ontario. Productivity is defined by the outputs of physicians measured as the number of visits in relation to the number of hours worked by the primary care physician. The study uses cross-sectional data collected directly from Ontario primary care practices. A request for participation was sent to all Ontario primary care physicians and those interested in participating were sent surveys to be completed. Survey questions can be categorized into characteristics of physicians, characteristics of the organization and of the structure of the primary care practice, and patient characteristics. Information collected included data on the inputs and outputs of the primary care practices. Regression analyses were conducted to determine the effect of the different inputs on the outputs achieved by physicians. A total of 185 physicians participated in the study with a high level of incomplete surveys. Different regression models were run to account for the incomplete data and to have as many observations as possible. The main variable affecting the number of encounters physicians can have is the average consult time which has a high variability ranging from 7 to 30 minutes with an average of 15 minutes. There was a high correlation between practice characteristics such as the staff employed and the percentage of income from different sources. Salary payment compared to fee-for-service and a higher percentage of patient rostered are associated with a lower productivity whereas a larger panel is associated with higher productivity. With the high effect that consultation time has on productivity, this study questions the value of measuring productivity without considering the value of the time spent by a physician with his/her patients. More research is needed to understand how to better measure the value of the outputs of physicians' work.

24 Publicly funded medical travel subsidy programs in Canada**MARIA MATHEWS**

Travelling long distances to access health services is a reality for residents of rural communities. Rural residents can incur substantial travel related costs to receive needed care. We describe and compare the medical travel programs offered by provincial and territorial governments. We conducted a document analysis to describe and compare medical travel subsidy programs available in Canada to the general public. Only provincial/territorial government-funded programs were included in the study. We did not include programs by hospitals, regional health authorities, charitable organizations or private firms. We excluded programs offered on the basis of employment (e.g. RCMP) or aboriginal status (Non-Insured Health Benefits Program). To gather information about each program, we consulted the websites of provincial/territorial governments and health ministries and interviewed program contacts by telephone. For each program, we gathered information on program terms and conditions including eligible applicants, services, expenses. All but two of the provinces and territories (AB and NB) offer some program to alleviate travel costs. Programs may take the form of transportation provision (BC, SK), referral to discounts from commercial providers (BC), or financial reimbursement (BC, MB, ON, QC, PEI, NS, NL, YK, NT, NU). Of the financial reimbursement programs, eligibility criteria vary by age of patient, geographic area, and/or travel distance. Programs cover emergent and elective insured services either not available in residents' community/region or in the province. Eligible expenses vary by program and may include travel, lodging, and meals. Only NL allows expenses for 'medically unnecessary' escorts. Rates, co-payments and maximum allowable amounts vary by program and reimbursement is usually provided after travel has occurred. Many provinces and territories offer subsidy programs to alleviate the costs related to travel for medical care. However, the availability and terms and conditions of these programs vary widely. The study highlights regional disparities that may contribute to inequitable access to care across Canada.

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4 Quality Compass: Health Quality Ontario's Web Based Knowledge Transfer & Exchange tool to promote spread and uptake of evidence based best practices**STACEY BAR-ZIV**, Team Lead, Knowledge Transfer & Exchange, Health Quality Ontario

In June 2013 Health Quality Ontario (HQP)'s Knowledge Transfer & Exchange team launched Quality Compass, a web platform with one-stop access to credible knowledge aimed to catalyze the spread of best practices to make improvements that will lead to sustainable change in Ontario. The Compass provides resources, performance and measurement information, evidence-based best practices, tools, HQO's Quality Improvement framework, and success stories designed to maximize performance. This tool was developed with experts and partners as a resource to catalyze uptake of best practices and support improvement efforts. Currently topics include: Long-Term Care, Primary Care, Acute Care, Leadership, Person and Family Centered Care, and Transitions (new topics under development: Quality-Based Procedure implementation, Home Care, and Patient/Resident Experience. Each topic provides an overview of provincial performance, indicators and tools to measure performance, and a compilation of evidence-based best practices and change ideas to facilitate quality improvement. The tool serves as a repository of success stories, highlighting 'bright spots' with implementation details to support spread of sustained implementation. Preliminary data from Quality Compass metrics show steady and sustained visits to the site over 6 months. Results of a formal evaluation of user experience to understand experience, impact and barriers and to inform refinement of this tool as a knowledge transfer and exchange vehicle will be shared. The Quality Compass [<http://qualitycompass.hqontario.ca>] is a knowledge transfer and exchange tool, contextualized to Ontario to promote the spread and uptake of evidence based best practices to accelerate change leading to sustainable improvements in Ontario.

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53 Representativeness and Data Quality in the Canadian Primary Care Sentinel Surveillance Network (CPCSSN)**TYLER WILLIAMSON**, CPCSSN Senior Epidemiologist, Queen's University

The Canadian Primary Care Sentinel Surveillance Network (CPCSSN) consists of a robust and secure national infrastructure that extracts and uses anonymous patient electronic medical record (EMR) data to provide high-quality health information about Canadian primary care. We present the representativeness and quality of the CPCSSN data holdings. Using key metrics, the representativeness of provider and patient data in the CPCSSN database is compared to the National Physician Survey (NPS) for physician level data and the 2011 Canadian census for patient level data. The quality of the CPCSSN database is measured against the Canadian Institute for Health Information (CIHI) Data Quality Framework. CPCSSN extracts data quarterly from sentinel physicians. The results reported in the abstract are derived from data extracted on December 31, 2012. They will be updated at the time of presentation. Patients who are included in CPCSSN are on average older than those from the Canadian census and more likely to be female (56.9% vs. 51.0%). Physicians contributing data to CPCSSN are more likely to be under 45 (38.6% vs. 29.9%) and more likely to be female (53.9% vs. 44.2%). CPCSSN physicians are slightly more likely to be academic physicians (11.1% vs. 8.3%); however, the geographical location of participating clinics is comparable between CPCSSN and the NPS (14.3% vs. 13.9%). Of the 61 indicators in the CIHI indicator framework, 3 are not applicable. Of the remaining 58, CPCSSN has successfully achieved 37 (63.8%). The domains of timeliness and usability are areas most needing improvement. Patients within the CPCSSN database are acceptably representative of the national base populations of primary care providers and patients across the country. Further improvement will derive from the recruitment of older, non-academic and male providers.

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32 Smoking: A population-based analysis of the healthcare burden attributable to smoking in Manitoba, Canada

NATHAN C NICKEL, Research Scientist, Assistant Professor, Manitoba Centre for Health Policy, Faculty of Medicine, University of Manitoba

Measuring smoking's burden on the healthcare system is important to understanding the societal costs of smoking. The objective was to measure (a) the excess premature mortality and (b) both the short-term and long-term excess burden on the healthcare system attributable to smoking in Manitoba, Canada. Data came from the Population Health Research Data Repository held at the Manitoba Centre for Health Policy. De-identified administrative data-health insurance registry, hospital, medical claims, pharmaceutical, and long-term care-were linked with data from the Canadian Community Health Survey (CCHS), 2000 to 2011, to measure smoking status and behavioural characteristics for 36,633 individuals. Smoking status was classified as: current daily smoker; former daily smoker, stopped ≥ 5 years; former daily smoker, stopped >5 years; never daily smoker; and never smoked. Smoking prevalence was estimated. Healthcare burden was modeled using propensity-score adjusted regression models with survey weights. Propensity-score adjusted models revealed that 'Former daily smoker, stopped ≥ 5 years' had elevated premature mortality rates compared with 'Never Smoked' at 3 years (Rate Ratio (RR) 12.5; 95% CI 2.8-55.7), 5 years (RR 5.7; 95% CI 1.5-21.4), and 10 years (RR 3.5; 95% CI 1.2-10.2) post-survey. Current smokers had elevated premature mortality rates at 3, 5, and 10 years post-survey ($p < 0.05$). 'Former daily, ≥ 5 years' had excess healthcare use compared with 'Never Smoked'-- 'Former daily, ≥ 5 years' had elevated ambulatory visit rates at 3 years post survey (RR 1.1; 95% CI 1.0-1.2), elevated pharmaceutical use at 3, 5, and 10 years post survey ($p < .05$), and increased days in hospital at 3, and 10 years post survey ($p < 0.05$). Daily smoking (current daily and stopping ≥ 5 years) places excess burden on the healthcare system which persists up to ten years post-survey. Upstream efforts to further decrease daily smoking could reduce healthcare burden and premature mortality.

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38 Spreading Best Practices in Home Care Organizations: Theoretical Understandings and Decision-Maker Perspectives

JENNY PLOEG, Professor, School of Nursing, McMaster University

The objectives of this presentation are to: Describe a theory of how best practices are spread within home care organizations. Describe the lessons learned related to spread of best practices from the perspective of a home care decision maker. A qualitative Grounded Theory approach was used. Four home care organizations in Ontario that had implemented best practice guidelines related to older adults (i.e., falls prevention, pain management, management of venous leg ulcers) participated in the study. Qualitative interviews were conducted with 8-12 front line providers, managers and directors per site at baseline (n=44) and one year later (n=40). Participants discussed their involvement in the process of spread, perceived facilitators and barriers to spread and outcomes related to spread. Open, axial and selective coding and constant comparison analysis were used to develop a theory of the process of spread. A theory of the process of spread of best practices in home care was developed. The phases of spread included: (1) committing to change, (2) implementing on a small scale, (3) adapting locally, (4) spreading internally to multiple users and sites, and (5) disseminating externally. Factors that facilitated progression through these phases were: (1) leading with passion and commitment, (2) sustaining strategies, and (3) seeing the benefits. Project leads, champions, managers and steering committees played vital roles in leading and facilitating the spread process. Strategies such as educating and coaching and evaluating and feedback were viewed as key to sustaining the change. The process of spread occurred within the home care context of high staff and manager turnover, time and resource constraints and managed competition. Findings indicate that spread of best practices in home care can be optimized through the application of the phases of spread, allocation of resources to support spread (e.g., dedicated leads) and addressing potential barriers. Further research is needed to test the theory and understand how best practices are spread externally.

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40 Supporting Professional Socialization for a New Generation of Nurses and Health Professionals Using Innovative Knowledge Translation

SHERI PRICE, Assistant Professor, School of Nursing, Dalhousie University

This presentation will describe the use of video vignettes and social media as a knowledge translation strategy in disseminating research on Millennial nurses' career choice experiences. This presentation will provide a detailed account of how researchers can use innovative approaches in dissemination, including the development of video scripts from participant narratives. This presentation will describe the use of innovative KT methods (ie: YouTube Videos, Facebook & Twitter) to disseminate the findings of a narrative inquiry that explored career choice among Millennial nurses. This presentation will describe how the narratives were reconfigured to create a 'Be a Nurse' campaign which involved a recruitment video, a series of 5 career choice vignettes, a website and social media applications. Various dissemination strategies, targeted for a wide array of stakeholders across health disciplines will also be discussed. Participant narratives described how there is a need for an updated image of nursing, and health professions to attract future generations of students. Moreover, within career choice experiences, student interested in the health professions are often socialized to set the disciplines in opposition to one another. This KT project is responsive to the need for recruitment initiatives that promote interprofessional respect and collaboration and also serves as the template for a 'Be A Health Professional' professional socialization campaign. Students were instrumental to the pilot and creation of the videos and social media content and the engagement of key stakeholders from education, labour, academic and research arenas also ensured the success of the project. The findings of this research and KT plan demonstrate how these methods can be effective in transforming knowledge into practice. Moreover, this project demonstrates how these applications can assist future health professionals and those who educate them in creating a sustainable network to share and discuss relevant issues and resources.

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44 Supporting Quality in Home Care Through Public Reporting

MORGAN SLATER, Project Lead, Health Quality Ontario

In 2008, the Ministry of Health and Long-Term Care asked our organization to measure and report on the quality of home care services in Ontario. The objective of our work was to strengthen accountability and transparency in the provision of quality home care through public reporting. A collaborative approach was used, engaging stakeholders across the province through the formation of an advisory group. Quality indicators were selected through a modified Delphi process. This included an initial literature search to identify existing indicators; a survey of a panel of researchers and stakeholders to assess the identified indicators on nine different domains (validity, feasibility, clarity, comparability, actionability, reliability, responsiveness and timeliness); and an in-person meeting to finalize the indicators based on their suitability for public reporting. The advisory group then discussed the most appropriate medium for public reporting and the best methods to engage the sector. Eleven quality indicators, spanning 6 attributes of quality, were selected by the expert panel: hospital and community wait times, incontinence, communication, hospital readmissions, falls, pressure ulcers, client satisfaction, emergency department visits, long-term care home placement, and influenza vaccination. These indicators are reported at the provincial and regional (i.e., Community Care Access Centre) level on our website. Stakeholders and service providers have an increased awareness of the importance of public reporting in improving the accountability, transparency and quality of home care. To further our objective, we are moving towards reporting quality indicators at the service provider level. A working group is evaluating the suitability of the current set of home care quality indicators for reporting at the service provider level. Ontario is leading the way in public reporting for the home care sector; our organization's website is the first to publicly report on the quality of home care services in Canada. We attribute our success to an approach that is both methodologically rigorous and inclusive of stakeholders and providers.

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22 The Feasibility, Acceptability and Effects of an Interprofessional Nurse-Led Mental Health Promotion Intervention in Older Home Care Clients

MAUREEN MARKLE-REID, Associate Professor and Canada Research Chair, Aging, Chronic Disease and Health Promotion Interventions, Scientific Director, Aging, Community, and Health Research Unit, McMaster University

The objectives of this study were to examine the feasibility and acceptability of a new 6-month interprofessional (IP) nurse-led mental health promotion intervention, and to explore its effects on reducing depressive symptoms in older home care clients (> 70 years) using personal support services. A one-group pre-test post-test study design was used. The intervention was a six-month evidence-based depression care management strategy led by a Registered Nurse (RN) that used an IP approach. Of the 142 eligible consenting participants, 98 (69%) completed the 6-month and 87 (61%) completed the one-year follow-up. Outcomes included depressive symptoms, anxiety, health-related quality of life (HRQoL), and the costs of use of health services at pre-test, 6-month and one-year follow-up. An interpretive descriptive design was used to explore older adult, nurses' and personal support workers' perceptions about the intervention's appropriateness, benefits, and barriers and facilitators to implementation. Of the 142 participants, 56% had depressive symptoms, and 38% of these participants had moderate to severe depressive symptoms. The findings provide initial evidence suggesting the intervention is feasible and acceptable to older home care clients with depressive symptoms. It was effective in reducing depressive symptoms and improving HRQoL (all $p < 0.05$) at 6-month follow-up, with a small further improvement six months after the intervention. The intervention was also effective in reducing anxiety ($p=0.003$) at one-year follow-up. Significant reductions were observed in the use of hospitalization, ambulance services, and emergency room visits over the study period (all $p < 0.05$). Overall, the nurses and personal support workers viewed the intervention as highly acceptable and identified a full range of benefits. The findings provide initial evidence for the feasibility, acceptability and sustained effects of the intervention in improving client outcomes, reducing use of expensive health services, and improving clinical practice behaviours of home care providers. Future research should evaluate its efficacy using a randomized clinical trial in different settings.

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46 The Health Care Cost of Dying: A Population-Based Examination across Health Care Sectors in the Last Year of Life

WALTER WODCHIS, University of Toronto

1) Describe overall health care cost across health care sectors in the last year of life. 2) Describe the socio-demographic characteristics of individuals who use each health care sector at the end-of-life. 3) Describe the cost curves for each health sector as the population approaches death. We conducted a retrospective cohort analysis of decedents between April 1, 2010 to March 31, 2012 in Ontario. For each decedent, we examined health care use and cost in the 12 months prior to death using various health administrative databases held at the Institute for Clinical Evaluative Sciences. We examined the effect of sociodemographic variables, and describe the trajectory of use and cost in the months prior to death. We captured 175,478 decedents and recorded health care use for 173,139 in the last year of life. The average cost incurred was \$49,924, with a total cost of \$8.76 billion. 45.5% of all costs were incurred in the acute inpatient hospital setting, followed by long-term care costs (16.7%), physician costs (10.1%), and home care costs (8.4%). There were very little gender differences, with the highest costs observed in the middle-older age groups (55-84 years). There were no consistent gradients of use and cost across neighborhood income quintiles. Health care cost increased greatly in the last 60 days prior to death, largely due to increasing cost in acute care settings. The direct health care cost in the last 12 months of life is significant. The majority of costs occurred in acute care settings, and in the last 60 days of life. Interventions that focus on shifting care to community and continuing care settings will likely reduce overall costs.

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10 The Timing of Teen Pregnancy and High School Enrollment: A PATHS Equity for Children Project

DAN CHATEAU, Assistant Professor, Manitoba Centre for Health Policy, University of Manitoba

School based interventions aimed at reducing teen pregnancy and STIs have limited impact on girls who are no longer enrolled in school (i.e., dropouts). To determine the proportion of teen pregnancies amongst high school age girls that occur before dropping out of school, after, or having no impact on enrollment. This study used the Population Health Research Data Repository held at the Manitoba Centre for Health Policy, which includes complete population data from the Ministry of Education and the Ministry of Health. Linked using a unique anonymized identifier, the cohort included all girls in Manitoba enrolled in Grade 9 between 2003 and 2010 and followed for at least 3 years. Pregnancies were assigned to one of three categories: continuous enrollment (no break in school); dropouts prior to pregnancy; and dropouts after becoming pregnant. Total re-enrollment and graduation rates after pregnancy were also calculated, and compared by income quintile for each group. The majority of high-school age teen pregnancies occur amongst girls in school, with the majority of those students having no break in school enrollment. However, in the lowest income quintile dropping out prior to becoming pregnant comprised 45% of pregnancies, but only 35% for the highest quintile. For students in Grades 9 - 11, dropouts prior to pregnancy were less likely to ever re-enroll (17.5%) than dropouts after pregnancy (35%). This was not related to income quintile, however. For pregnancies occurring amongst grade 12 students, over half the students graduate on time in all income quintiles. Up to 70% graduate within 6 years of entering high-school. Although income quintile is associated with the rate of pregnancies resulting in births, it appears to have little impact on outcomes related to high-school enrollment and graduation. School based interventions will only reach about 70% of teen girls who become pregnant, but this is dependent on SES.

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50 The use of persona-scenario exercises to co-develop of the TAPESTRY program

RUTA VALAITIS, Dorothy C. Hall Chair in Primary Health Care Nursing, McMaster University

TAPESTRY is a community-based primary healthcare program aimed at keeping older adults healthy at home. Prior to implementation, key stakeholder groups were engaged to assist in the co-development of the four components of the project: volunteers, technology, system navigation, and interprofessional teams. This qualitative study engaged convenience samples from each stakeholder group in persona-scenario exercise group sessions. Participants created a fictitious, authentic 'persona' and moved personas through the intervention being developed (the scenario) using sets of guiding questions. Results were presented to the larger group, audio-recorded, transcribed and coded in NVivo10 using microcoding (highly descriptive nodes). Two investigators independently reviewed each node to document specifications, denoting actions required to actualize each idea; and items, documents, and other tangible things needed to carry out the action. Finally, a program 'to-do' list based on specifications was created to form the basis of program development. Thirteen persona-scenario exercises were completed including 4 groups with community or academic clinicians, 4 groups of older adult and novice volunteers, 2 groups of community service providers, and 3 groups of patients and one pilot session. A total of 70 participants were engaged. The most common issues that emerged across all groups were volunteer activities during patient visit, the role of individuals from the interprofessional team or community organizations, function of the EMR and aspects of patient enrollment. This included specifications not previously considered by the research team such as volunteer retention strategies and volunteer professional development, end of program retraction protocols for patients, and endorsements of the volunteer by clinicians to improve patient trust. Over 350 specifications across 49 program domains were identified. The persona-scenario exercise approach was a feasible and useful method to assist with participatory co-development of the TAPESTRY intervention and allowed researchers and decision makers to identify areas of consideration that had not been previously thought of by the research group.

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15 What are the experiences of patient calling primary care provider offices after hours? MAAP-NS: A Nova Scotia Population Study**EMILY GARD MARSHALL**, Assistant Professor, Dalhousie Family Medicine

Patients often attempt accessing providers or information outside of regular working-hours and there is an opportunity to provide information on outgoing recorded messages. The objective of this study is to illustrate what services, referrals, and information is provided to patients calling primary care provider offices outside of working hours. Researchers telephoned every family physician and primary care nurse practitioner office in Nova Scotia (n=458, Aug-Nov 2013), outside-working hours and recorded all options and dialogue in an access database. The primary outcomes included the presence of: on-call services, referral to 811 and 911 or other outside-hours services, and ability to leave a voicemail. Additional outcomes include: a subjective rating of the clarity of the outgoing message and presence of additional information. Data were analyzed using SAS 9.2. The following results are for the 380 out of 458 offices with an answering machine. On-call services were only available for 4.4% of provider offices. Referral to other after-hour services varied with 52.3% of offices referring to the emergency department, 20.8% to 811 services, 28.7% to 911 services and 30.1% to other services like walk-in clinics or Collaborative Emergency Centres (CECs). Prospective patients had the ability to leave voice messages on 34% of answering machines. Hours of Operation were mentioned in 50.4% of messages. Answering services were reported by the callers as 'not at all clear' from 3.7% of offices, 'somewhat clear/easy to understand' from 21.2% of offices and 'very clear/easy to understand' from 75.1% of offices. An intervention of recommended best practices translated for primary care provider practices may improve patient experiences in trying to access services and information outside of working hours. For example, referrals and details for 811 and 911 and emergency department services could be standard practice. It is evident that on-call services are very seldom available and the majority of offices do not let patients leave a voicemail message and a large proportion have no answer machine at all.

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21 What Could the Future Hold? Simulating the demand for Osteoarthritis(OA) care in Alberta to plan a sustainable OA care system**KAREN MACDONALD**, Research Associate, University of Calgary

Osteoarthritis (OA) prevalence and the demand for OA care are increasing with the aging population. Policy-makers seek sustainable means of managing this growing demand while meeting benchmark targets, yet they currently lack tools to explore short- and long-term effects of policy options. We aimed to develop such a tool. We developed a system dynamics (SD) simulation of patient flow across the continuum of OA care in Alberta: from self-directed, primary and specialist care, through surgical interventions, post-surgical follow-up and long-term revisions. The simulation was developed using established SD modeling principles and an iterative, integrated knowledge translation process, including multiple workshops with clinicians and administrators to define the problem, system boundaries and document care processes. We then developed the SD stock-and-flow model and populated it with data extracted from administrative databases including physician claims, hospital inpatient records, and ambulatory care data. The model was then used to explore various scenarios. The model yields patient population, OA care resource requirements and associated cost results at each stage of care over 20 years by region and patient characteristics (e.g. sex). If current practices continue, annual hip and knee joint replacement surgery volumes are estimated to increase by more than 5,000 between 2015 and 2035. If a 14 week surgical wait-time is implemented in 2015, 600 additional surgeries must be performed in the first year to 'catch-up' on the existing surgical queue, yet long-term, surgery rates are similar to those without the wait-time target. The costs of performing the additional surgeries required to maintain the target are partly offset by the savings achieved by fewer patients requiring care while awaiting surgery due to their shortened wait-time. The SD model can be used as a decision-support tool to estimate changes in patient populations, resource requirements and costs over time and as a result of implementing various OA management scenarios. Such results can equip policy makers with additional evidence when planning for a sustainable OA care system.

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43 What explains gender inequalities in HIV/AIDS prevalence in Sub-Saharan Africa? Evidence from Demographic Health Surveys**DRISSA SIA**, MD, PhD, Institute for Health and Social Policy, McGill University

This study aimed to examine socio-economic, demographic and behavioral variables underlying gender inequality in HIV/AIDS in 21 SSA countries Using data from Demographic and Health Surveys and AIDS Indicator Surveys and an extension of the Blinder-Oaxaca decomposition approach we quantified the differences in HIV/AIDS prevalence between women and men attributable to socio-demographic factors, sexual behaviours, and knowledge of HIV/AIDS. We decomposed gender inequalities into two components: a proportion attributed to different levels of the risk factors between women and men and a proportion attributed to risk factors having differential effects on HIV/AIDS prevalence in women and men. Descriptive analyses showed that the difference between women and men in HIV/AIDS prevalence varied from a low of 0.68% in Liberia to a high of 11.5% in Swaziland. The decomposition analysis showed the 84% and 92% of the higher prevalence of HIV/AIDS among women in Uganda and Ghana, respectively, was explained by the different distributions of HIV/AIDS risk factors, particularly the age at first sex and prevalence of premarital sex, between women and men. In the majority of countries, however, differences in the effects of measured and unmeasured risk factors chiefly explained observed gender inequalities in HIV/AIDS, ranging from 81% in Mozambique and Rwanda to 116% in Congo Brazzaville. The differential effects of age, marital status and occupation for women and men were among significant contributors to this component. In four countries, specifically, Cameroon, Guinea, Malawi and Swaziland, the combination of risk factors being distributed differently and having differential effects for men and women explained gender inequalities in HIV/AIDS prevalence. The factors that explain gender inequalities in HIV/AIDS prevalence vary from country to country, suggesting that effective interventions for reducing the gender inequality should be country specific in SSA region. Moreover, further work is required to understand the determinants of gender inequalities in HIV/AIDS in countries such as Cameroon, Guinea, Malawi and Swaziland, where unmeasured factors contributed strongly to the difference in prevalence between women and men.

Co-Author(s): Yentéma Onadja, Département de Démographie, Université de Montréal; Mohammad Hajizadeh, Institute for Health and Social Policy, McGill University; Jody Heymann, University of California-Los Angeles (UCLA); Arijit Nandi, Institute for Health and Social Policy & Department of Epidemiology, Biostatistics, and Occupational Health, McGill University



CAHSPR ACRSPS

Canadian Association for Health
Services and Policy Research

L'Association canadienne pour la
recherche sur les services et les
politiques de la santé

Mark your Calendars!

**The date and location has been set for
the 12th Annual CAHSPR Conference**

May 26-28, 2015

Pre-Conference Day • May 25, 2015

Hilton Bonaventure Hotel • Montreal, QC

cahspr.ca

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Twitter: How To



To create an account

- Go to <http://twitter.com> and find the sign up box, or go directly to <https://twitter.com/signup>
- Enter your **full name**, **email address**, and a **password**.
- Click **Sign up for Twitter**.
- On the next page, you can select a **username** (usernames are unique identifiers on Twitter) — type your own or choose one Twitter has suggested. They will tell you if the username you want is available.
- **Double-check** your name, email address, password, and username.
- Click **Create my account**.
- Twitter will send a **confirmation email** to the address you sign up with, click the link in the email to confirm your email address and account.

Find and follow others

The next step is to find and follow other interesting Twitter accounts. Look for businesses you love, public service accounts, people you know, celebrities, or new sources that interest you. **TIP:** One great way to find accounts to follow is to see who those you admire are following. You find accounts by using the search tool.

Check Your Timeline: See what's happening

Tweets from those you follow will show up on your Twitter homepage – called your **Timeline**. New Tweets will show up every time you log on. Click links in others' Tweets to view articles, images or videos they've linked to. Click hashtagged  keywords to view all Tweets about that topic.

Start Tweeting!

It can be fun and exciting to contribute to your own Twitter content! When people get interested in what you are Tweeting, they may follow YOU to see what you have to say! Here are some tips to get started:



Build a Voice: Retweet, Reply, React

Use existing **Tweets** on Twitter to find your own voice and show others what you care about. **Retweet** messages that you love, or **@reply** with your reaction to a Tweet you find interesting.



Mention: Include Others in Your Content

When you're ready to make your own **Tweets**, consider mentioning others by using their Twitter username (preceded by the @ sign) in your **Tweets**. This will draw more eyes to your message and might even start a conversation!



Tweet Regularly

The best way to gain followers is to engage and contribute by **Tweeting** regularly in a meaningful way.

#Hashtag

Definition: The  symbol, called a hashtag, is used to mark keywords or topics in a Tweet. It was created organically by Twitter users as a way to categorize messages.

- Tweeters use the  symbol before a relevant keyword or phrase (no spaces) in their **Tweet**.
- Clicking on a  work in any message shows you all other **Tweets** marked with that keyword.
- The  can be used anywhere in the **Tweet** – beginning, middle, or end.
- Words that have a  become very popular and are often Trending Topics.



CAHSPR ACRSPS

Canadian Association for Health Services and Policy Research
L'Association canadienne pour la recherche sur les services et les politiques de la santé

Primary Health Care theme Group Meeting

About the group:

As one of CAHSPR's original theme groups, the Primary Health Care (PHC) theme group represents a subgroup of CAHSPR's broader membership that is interested in all aspects of PHC research and policy. Comprised of researchers, students, decision-makers and health professionals, our theme group aims to:

- Support an active network of individuals and organizations involved in PHC research and policy;
- Promote collaboration and partnerships between PHC and other components of the health care systems both in Canada and internationally;
- Provide venues for PHC theme group members and others to meet virtually or in person to present and discuss pertinent and timely topics of particular relevance to PHC;
- Liaise with other groups involved in the PHC endeavors (e.g., Canadian Institute for Health Information, Canadian Institutes of Health Research, Canadian Working Group for PHC Improvement, Pan Canadian PHC Research Strategy Network).

Why attend a CAHSPR PHC theme group business meeting?

Theme group business meetings are excellent opportunities to learn about the latest developments related to PHC research and policy. The last few years have seen much movement in the area of PHC in Canada and internationally. At business meetings leading researchers and organizations are invited to share information on their current or planned activities. For researchers, students and others, the PHC theme group business meeting is a welcoming environment that promotes learning, exchange and collaboration. A summary of the theme group's activities will also be presented and the PHC Student Presentation Award will be announced.

Date: Monday, May 12, 2014

Time: 4:30PM-6:00PM

Location: Simcoe Room (Lobby Level)

Please join us for an informative and stimulating panel discussion on **Solutions in primary health care for high users of health services.**

Date of Presentation: Thursday, May 15, 2014

Time: 1:15PM – 2:30PM

Location: Tom Thompson Room (Convention Level)

Panelists: Jean Mireault (Québec), Kim McGrail (British Columbia),
Walter Wodchis (Ontario), Fred Burge (Nova Scotia).

All are welcome at our activities and please follow us on LinkedIn: [CAHSPR Primary Health Care Theme Group](#)



Collaborative Healthcare Improvement Partnerships (CHIPs) Theme Group Meeting

About the CHIPs Theme Group

It is widely recognized that interaction between researchers, clinicians, managers and policy-makers is needed to enhance the relevance and use of research, and improve health care planning, delivery and outcomes. Such interactions are often referred to as integrated knowledge translation (IKT). These interactions are difficult to initiate and sustain, and must be nurtured over time. Further efforts are needed to promote and enable IKT. The purpose of the CHIPs theme group is to:

1. Undertake research to generate knowledge on the impact of IKT, and how to undertake, enable and evaluate IKT.
2. Support IKT by developing and sharing instructional resources and/or tools that guide and foster IKT.
3. Promote among researchers and research users by brokering relationships through the CAHSPR membership.
4. Contribute to capacity-building by engaging trainees in CHIPs theme group activities, and by educating all CAHSPR members through sessions and other activities at annual CAHSPR meetings.

About the CHIPs Theme Group Meeting

A select panel of researchers and research users will share their experiences and insight about IKT, and as a group we will consider needs and preferences for IKT support that will inform ongoing CHIPs Theme Group activities. *Space is limited so be sure to register for the CHIPs Theme Group panel session by email: anna.gagliardi@uhnresearch.ca.*

How Can We Strengthen Researcher-Research User Collaboration to Improve Health Service Planning, Delivery, Evaluation and Improvement?

Tues. May 13 / 2:30 to 3:45 / Tom Thomson Room (Convention Level)

R. Sacha Bhatia is a health policy researcher; Director of the Institute for Health System Solutions & Virtual Care at Women's College Hospital; and a Fellow at Massachusetts General Hospital and Harvard University. He was a policy advisor to the Premier of Ontario from Jan 2008 to Dec 2009, and now advises the Ministry of Health, hospitals and other organizations on health systems issues.

Bronwyn Davies is Executive Director, Community Health Services, Department of Health, New Brunswick. She holds undergraduate degrees from Mount Allison University and the University of Alberta, and a Master's degree from the University of New Brunswick. Her background is occupational therapy. She is a PhD candidate in interdisciplinary studies at the University of New Brunswick.

Carole A. Estabrooks is Professor, Faculty of Nursing, University of Alberta, and a Canada Research Chair (Tier 1) in Knowledge Translation. She is a Fellow, Canadian Academy of Health Sciences and in the American Academy of Nursing. She leads the Knowledge Utilization Studies Program, University of Alberta, and the Translating Research in Elder Care applied research program.

Diane Finegood is President & CEO of the Michael Smith Foundation for Health Research. Prior to this, she was inaugural Scientific Director, CIHR Institute of Nutrition, Metabolism and Diabetes, and Executive Director, Canadian Platform to Increase Usage of Real-World Evidence project. She is Professor, Department of Biomedical Physiology and Kinesiology, Simon Fraser University.

Sean Kidd is a Clinical Psychologist and Head, Psychological Services, Toronto Centre for Addiction and Mental Health, Schizophrenia Division. He is an Assistant Professor, Department of Psychiatry, University of Toronto. His research focuses on community mental health and marginalized populations and service development in both inpatient and outpatient treatment settings.

Anita Kothari is Associate Professor, Faculty of Health Sciences, Western University. Anita is interested in collaborative mechanisms that bring together researchers, practitioners and policymakers to generate socially robust knowledge. Anita holds a CIHR new investigator award and was recently presented with a faculty scholar award by Western University.

The SWG is a student-run voluntary working group of CAHSPR. Our main goal is to enhance and facilitate student involvement in the annual CAHSPR conference and in the health service & policy research community at large. For more information on the SWG, please visit our website, send us an email (swg@cashpr.ca), or come by our table at the conference!

Special Events for Students!

Brought to you by the CAHSPR Student Working Group (SWG)

Pre-Conference Workshop: Writing Blogs and Op-Eds for Health Services and Policy Research -- Monday | 1PM – 4PM. This event will be led by Karen Born, Jeremy Petch, Paul Taylor, and Steve Morgan. Come learn from these experts on how to successfully disseminate your own research to online audiences! (Event co-sponsor: Health System Performance Research Network)

Pre-Conference Primer -- Monday | 5PM – 6PM. Jeremy Veillard (CAHSPR President) and Frank Markel (CAHSPR Executive Director), along with Tom Closson and Walter Wodchis (2014 CAHSPR Conference Co-Chairs), discuss the goal of this year's conference and the significance of the conference theme.

CAHSPR on the Move -- Tuesday and Wednesday | 6:15AM – 7:30AM. Start your day with a brisk morning walk or run around downtown Toronto. Meet us in the lobby and we'll lead the way, or use our maps to venture out on your own. Open to everyone.

Students Speed Networking Event -- Wednesday, May 14 | 6PM – 7PM. This event offers students one-on-one conversations with some of CAHSPR's superstar experts and leaders. Student sign-up will occur on a first-come-first-serve basis at the SWG table starting Tuesday, May 13.

Student Social -- Wednesday | 7:30PM – 10PM. Join us for an evening of good company and great conversation (not to mention free appetizers!) at the Friar and Firkin. It's only two blocks from the Hilton – meet us there or join us on the walk over! We'll be leaving from the hotel lobby at 7:15pm.

For more information on these exciting events, check us out at:
<http://cahspr.ca/en/themegroups/student>



MATERNAL AND CHILD HEALTH SERVICES AND POLICY THEME GROUP MEETING

The Maternal and Child Health Services and Policy Research theme group is new sub-group of CAHSPR's broader membership of researchers, decision-makers, policy-makers, health and social services professionals and students who share a passion for maternal and child health research and policy.

Our mission is to develop a maternal and child health services and policy research network with a focus on:

- Capacity building
- Better access to, and use of cross-sectoral linkable data
- Facilitation of greater inter-provincial collaborations
- Increasing visibility of the field at CAHSPR and more broadly

About the MCH Theme Group meeting:

The meeting will be chaired by Astrid Guttman and Marni Brownell, with guest speaker Sarah de la Rue, Assistant Director of the CIHR Institute for Human Development, Child and Youth Health (IHDCYH). The agenda for the meeting will include

- Information and discussion of two important CIHR initiatives:
 - the SPOR initiative in Primary and Integrated Health Care <http://www.cihr-irsc.gc.ca/e/47614.html>. IHDCYH is one of the institutes funding this initiative and under the funding call, the networks are asked to include a plan for how research on children will be supported.
 - Provincial SPOR support units and access to administrative health data
- Theme group activities including the science stream for the 2015 meeting

We look forward to seeing you at the theme group meeting

Date: Monday, May 12, 2014

Time: 4:30 pm-6 pm

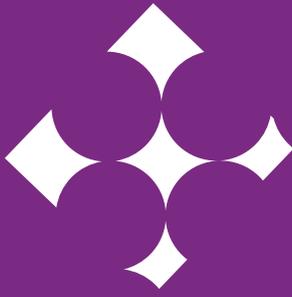
Location: Casson Room, Hilton Hotel, Toronto

- **For more information about the meeting or the theme group contact:**

Astrid Guttman and Marni Brownell

astrid.guttman@ices.on.ca Marni_Brownell@cpe.umanitoba.ca





ARCC

Canadian Centre
for Applied Research
in Cancer Control

Get Involved with ARCC Today!

The ARCC Network is a virtual community of researchers, clinicians, students, policy and decision-makers with expertise in applied cancer control research.

The mission of ARCC is to

- Facilitate collaborative research
- Support knowledge exchange and capacity-building initiatives

ARCC members have access to

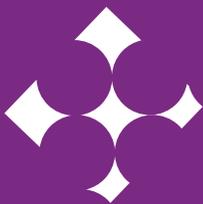
- Preferred member rates at the annual ARCC conference
- Workshops and seminars
- Work placements
- Mentorship opportunities
- Newsletters
- Get Connected – an online networking tool
- Pan-Canadian database of researchers

Contact us:

For more information about ARCC, contact us at arcc@cancercare.on.ca, visit us online @ www.cc-arcc.ca, or send us a tweet @CC_ARCC



*Advancing Health Economics, Services, Policy and Ethics
ARCC is funded by the Canadian Cancer Society*



ARCC

Canadian Centre
for Applied Research
in Cancer Control

JOIN US ARCC Conference 2015

May 24 - 25, 2015
Montreal, Quebec





Health Human Resources Theme Group Meeting

About the Group:

The CAHSPR Health Human Resources Theme group is a subgroup of CAHSPR's broader membership comprised of researchers, decision-makers, policy makers, health professionals, and others who share an interest in health human resources research and policy.

Our mission is to 1) facilitate networking, knowledge exchange and collaboration among individuals and organizations who have an interest in health human resources research, policy and planning; and 2) to elevate the profile, and improve the dissemination, of health human resources research and policy development at the CAHSPR conference and within the broader CAHSPR community.

Specific objectives of the Health Human Resources Theme group are as follows:

- ◆ To create an active network of researchers, practitioners, and decision- and policy-makers who have an interest in health human resources research, policy and planning;
- ◆ To work with other organizations/partners, to facilitate linkage and exchange between health human resources organizations in Canada and internationally;
- ◆ To provide venues and opportunities for supporting communication and collaboration amongst members at the CAHSPR conference and between CAHSPR events;
- ◆ To promote HHR research and knowledge translation within the HHR policy community at CAHSPR events; and
- ◆ To support efforts to build capacity in health human resources research.

About the HHR Theme Group Meeting:

Led and hosted by Ivy Lynn Bourgeault, Gail Tomblin Murphy and Morris Barer of the Canadian Health Human Resources Network, this meeting will include an update on the CAHSPR HHR Theme Group activities, an election of the chair and steering committee and an announcement of the judging process for the CAHSPR HHR Theme Group **HHR paper and poster presentation awards**.

Date: Monday, May 12, 2014

Time: 12:00pm-1:30pm (EDT) **Lunch will be provided**

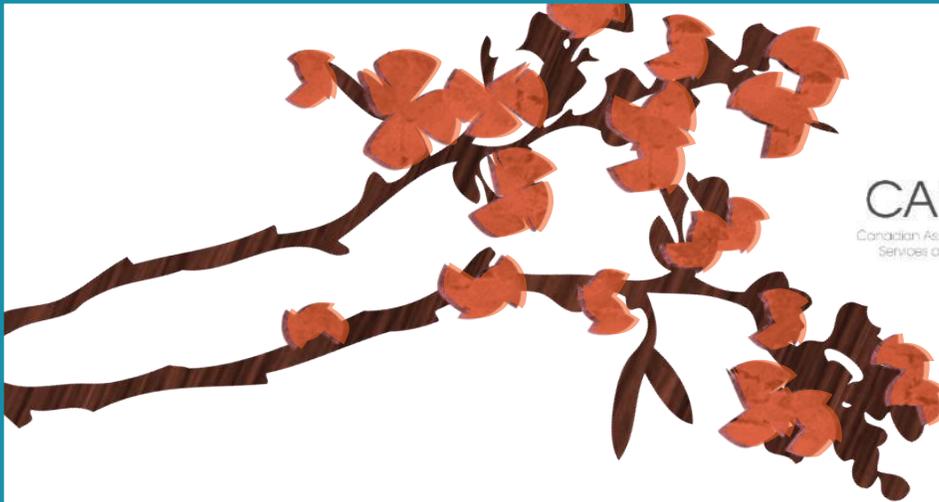
Location: Simcoe Room, Hilton Hotel, Toronto

Please RSVP no later than May 2nd 2014

The current chairs will also provide an update of HHR activities across the country and a few highlights from the CAHSPR Scopes of Practices Panel discussion that is taking place on **Thursday May 15th** from 10:45am-12:15pm.

For more information about the meeting or to join the CAHSPR HHR Theme Group contact:
info@hhr-rhs.ca





MENTAL HEALTH THEME GROUP ACTIVITIES

Business Meeting

May 12, 2014, 4:30 PM – 6:00 PM
Johnston Room,
Convention Level,
Hilton Hotel, Toronto

Led by members of the CAHSPR Mental Health Theme Group Executive Committee, this meeting will include an update on our activities, an election for open positions on the committee and updates from our subcommittees including:

- Membership and Communications
- Sustainability
- Conference Planning

Networking Activity

May 14, 2014, 5:30 PM – 8:00 PM
Centre for Social Innovation, 585 Dundas
Street East, 3rd Floor, Toronto

We will meet in the Lobby of the Hilton Hotel at 5:30 pm and head over to the Centre for Social Innovation located in Regent Park. There, we will receive a tour of the Centre and be introduced to some of the local programs and initiatives.

Appetizers and beverages will be provided afterwards at the Paintbox Bistro Lounge.

Bring your business cards and connect with researchers, scientists and students in the field of mental health. **Please RSVP no later than, May 6th, 2014 using this link:**

<http://cahsprmentalhealth.rsvpify.com/>



Please also join us at this year's **Mental Health Theme Group organized session** The Bridging of Research and Policy by At Home/Chez Soi: A multi-site trial of Housing First for persons with a mental illness who are homeless, which is taking place on **Thursday May 15th, from 1:15 pm to 2:30 pm.**

About Us: The CAHSPR Mental Health theme group is a community of researchers, decision-makers, and other individuals who have a particular interest in mental health services, research and policy. Our mission is to facilitate networking, knowledge exchange, significant discussions, and collaborative work amongst members of the group on mental health research and intersecting points between mental health and other health sectors. We endeavor to raise the profile of mental health research and facilitate its dissemination at annual CAHSPR conferences, and ultimately to improve mental health services and support through the dissemination and application of science and policy.

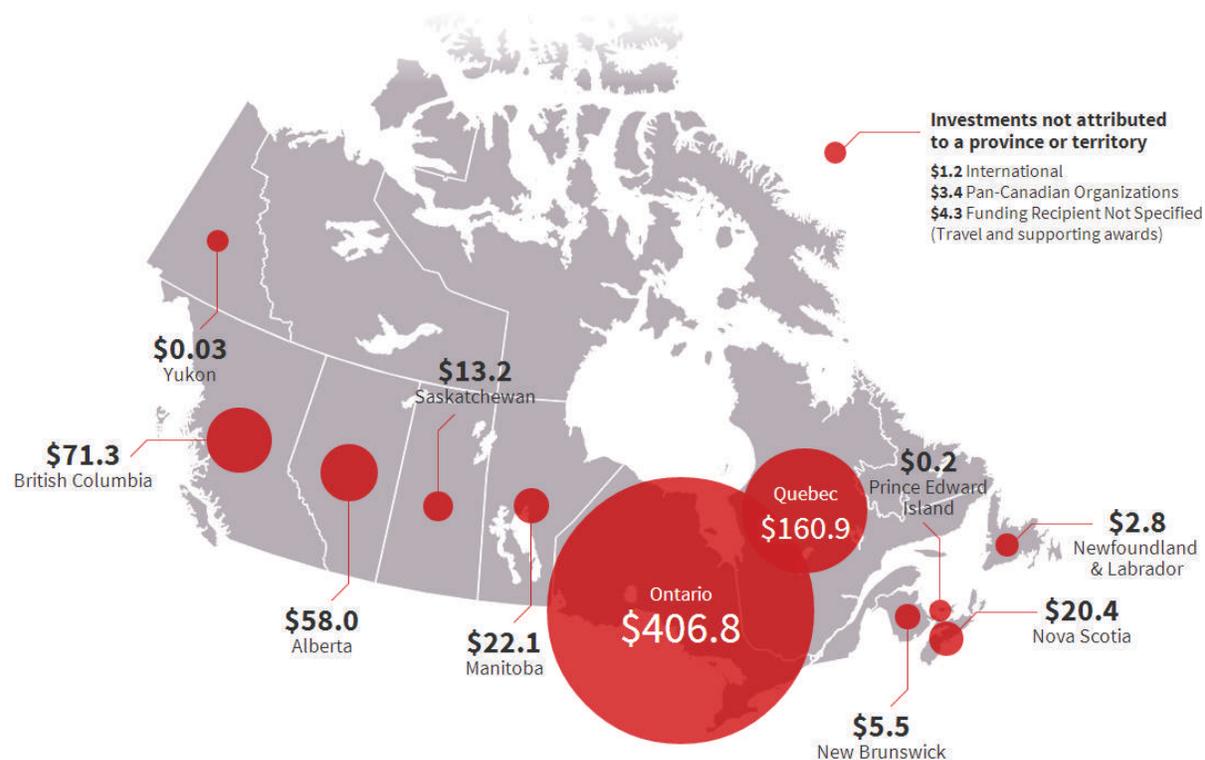
If you would like to join the Mental Health Theme Group, login to your [CAHSPR account](#), click on Manage Profile at the top of the page and then Membership Options and select Mental Health under Theme Groups. You can also join our [LinkedIn Group](#) and follow us on Twitter [@CAHSPR_MHTG](#).

FOR MORE INFORMATION CONTACT: CAHSPR.MHTG@GMAIL.COM



[@CAHSPR_MHTG](#)

Pan-Canadian Vision & Strategy for Health Services and Policy Research



The CIHR-Institute of Health Services and Policy Research, provincial health research funding organizations and many national health charities are working together and with the researcher and knowledge user community to develop the first-ever pan-Canadian vision and strategy for health services and policy research (HSPR). The results of a strategic analysis of Canada's HSPR investments, assets and resources are available in a comprehensive report and interactive asset map.

Following a collaborative Priorities Forum with partners, policy and clinical leaders, researchers and citizens to identify pan-Canadian HSPR priorities for collaborative action over the next five years, participants committed to establish a HSPR Alliance. This Alliance will strengthen Canada's HSPR enterprise, ensure research intelligence drives health system transformation, and optimize the impact of research on the health of Canadians and their health care system.

**Join us for a conversation about future HSPR directions for Canada.
The vision, strategy and go-forward Alliance plan will be shared in a plenary session with international comparison and commentary for the community's input and engagement.**

**Wednesday, May 14
4:30pm – 5:30pm
2014 CAHSPR Conference**

To learn more about the pan-Canadian vision and strategy for HSPR initiative, asset map or Alliance, visit <http://www.cihr.ca/e/47945.html>



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A website that shows people how their health system is performing

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A 3-day pilot school on health system performance diagnosis, evaluation and improvement

Indicator Library

A one-stop shop for information about 60 important performance indicators

Patient Experience Survey

A way to capture the patient experience in acute care hospitals, to be used for reporting on patient experience indicators

▶ ▶ ▶ Coming in September

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