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

CAHSPR.CA

Learning from Each Other:
Across Disciplines, Jurisdictions and Generations

Conference Program

Annual CAHSPR Conference

May 26 – 28, 2015 • Pre–Conference Day: May 25, 2015
Hotel Bonaventure • Montreal, QC

Across Regions • Across Provinces • Across Nations

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Institute of Health Services and Policy Research
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CHHRN
Canadian Health Human Resources Network

MCIS
Language Services

Ontario
Health Quality Ontario
Qualité des services de santé Ontario

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FEATURED SUPPLEMENTS

Thank you to the Conference Planning Committee Meeting for their contribution

Conference Chairs

Erin Strumpf, Associate Professor, Department of Economics, Department of Epidemiology, Biostatistics and Occupational Health, McGill University

Denis Roy, Vice-president, Science and clinical governance, Institut national d'excellence en santé et service sociaux

Scientific Chairs

Susan E. Bronskill, Scientist & Lead, Health System Planning & Evaluation Program, Institute for Clinical Evaluative Sciences

Roxane Borges Da Silva, Assistant Professor, Faculty of Nursing, Université de Montréal; Researcher, Université de Montréal Public Health Research Institute

Committee Members

Jeremy Veillard, President, CAHSPR; Vice President of Research and Analysis, Canadian Institute for Health Information

Frank Markel, Executive Director, CAHSPR

Stephen Samis, Vice President, Programs, Canadian Foundation for Healthcare Improvement

Robyn Tamblyn, Scientific Director, Institute of Health Services and Policy Research, Canadian Institutes of Health Research

Elizabeth Drake, Associate, Institute Strategic Initiatives, Institute of Health Services and Policy Research, Canadian Institutes of Health Research

Melodie Yun-Ju Song, Health Policy PhD student, Department of Clinical Epidemiology and Biostatistics, McMaster University

Marcel Saulnier, Director General, Health Care Strategies Directorate, Strategic Policy Branch, Health Canada

Lucie Richard, Directrice, Institut de recherche en santé publique de l'Université de Montréal (IRSPUM)

Sally Clelford, President, Face 2 Face Events Management

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Shannon Sullivan
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Walter Wodchis
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CAHSPR ACRSPS
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L'Association canadienne pour la recherche sur les services et les politiques de la santé

Welcome to the 2015 CAHSPR Conference

It is our pleasure to welcome you to the 2015 CAHSPR Conference, our twelfth, held this year in Montreal. I hope you are reading this welcome note, not in the traditional paper program, but on our new conference app, another first for CAHSPR! In keeping with CAHSPR's mission to bring together health services researchers with decision makers so that we can learn from each other, this year's conference is entitled "Learning from Each Other: Across Disciplines, Jurisdictions and Generations." We expect a robust attendance at our 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 learning from each other. In the opening plenary session, Claude Evin, Director General of the Agence regionale de sante, Ile-de-France, will speak to us about the French health system, which has been recognized internationally for its high level of performance. Dr. Evin's presentation will be followed by reaction from Antonia Maioni and Jean Rochon, two highly regarded figures within the Quebec healthcare system.. Our focus on international comparisons continues with our Tuesday afternoon plenary session "Health System Improvement in Australia: Knowledge Organizations as Enablers," presented by Jean-Frederic Levesque, now working in Australia as Chief Executive Officer of the Bureau of Health Information of New South Wales, but with a long record of experience in Canada. Alan Katz and Michel Clair will respond to Jean-Frederic's presentation.

On Wednesday, Tony Culyer, our Hall Laureate for 2015 will give a personal perspective of 50 years of Health Economics. Our closing plenary session, on Thursday afternoon will focus on the important question of regionalization in our healthcare system, asking the question what is the future of regionalization? Jean Louis Denis will speak on recent research looking at regionalization, with commentary from such distinguished panelists as Brian Postl.

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 would particularly like to thank Denis Roy and Erin Strumpf who co-chaired the program committee, and all of the committee members who planned this year's event. Special thanks to Susan Bronskill and Roxanne Borges Da Silva for leading the abstracts review process. Finally, we thank Sally Clelford 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 website www.cahspr.ca. Please join us at the CAHSPR Annual General Meeting on Thursday, May 28th at 7:15am. 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

2015 Annual Scientific Conference Program

Modern health systems rank amongst the most complex achievements of mankind. As is the case with any intricate organization, health systems across Canada are forever developing strategies and procedures to meet the needs of their population, in accordance with their individual context.

At the crossroads of Canadian and international learning systems, CAHSPR remains committed to reducing the gap between available research evidence and knowledge translation. In fact, CAHSPR endeavours to facilitate the sharing of knowledge and approaches, particularly with regard to research and experiments, to guide the improvement of policies and practices.

Discussions at the upcoming Montreal Conference, from May 26 to 28, will therefore focus on this particular theme: learning from each other, across disciplines, jurisdictions and generations.

The highest level of interaction between health regions, provinces and various leading countries has been built into the Program. In so doing, we hope to drive vibrant exchanges among the many professions and scientific disciplines found under the umbrella of health. Finally, we strove to provide space for the contrasting views held by various generations of men and women who work in the field, whether they are young and emerging or mid-to late-career, seasoned professionals.

It is our hope that these exchanges will feed conversations at the Conference, and create the spark that will revive or sustain passions for the public health system in our country.

Erin Strumpf

Associate Professor
Department of Economics, Department of Epidemiology,
Biostatistics and Occupational Health
McGill University

Denis A. Roy

Vice-president
Science and clinical governance
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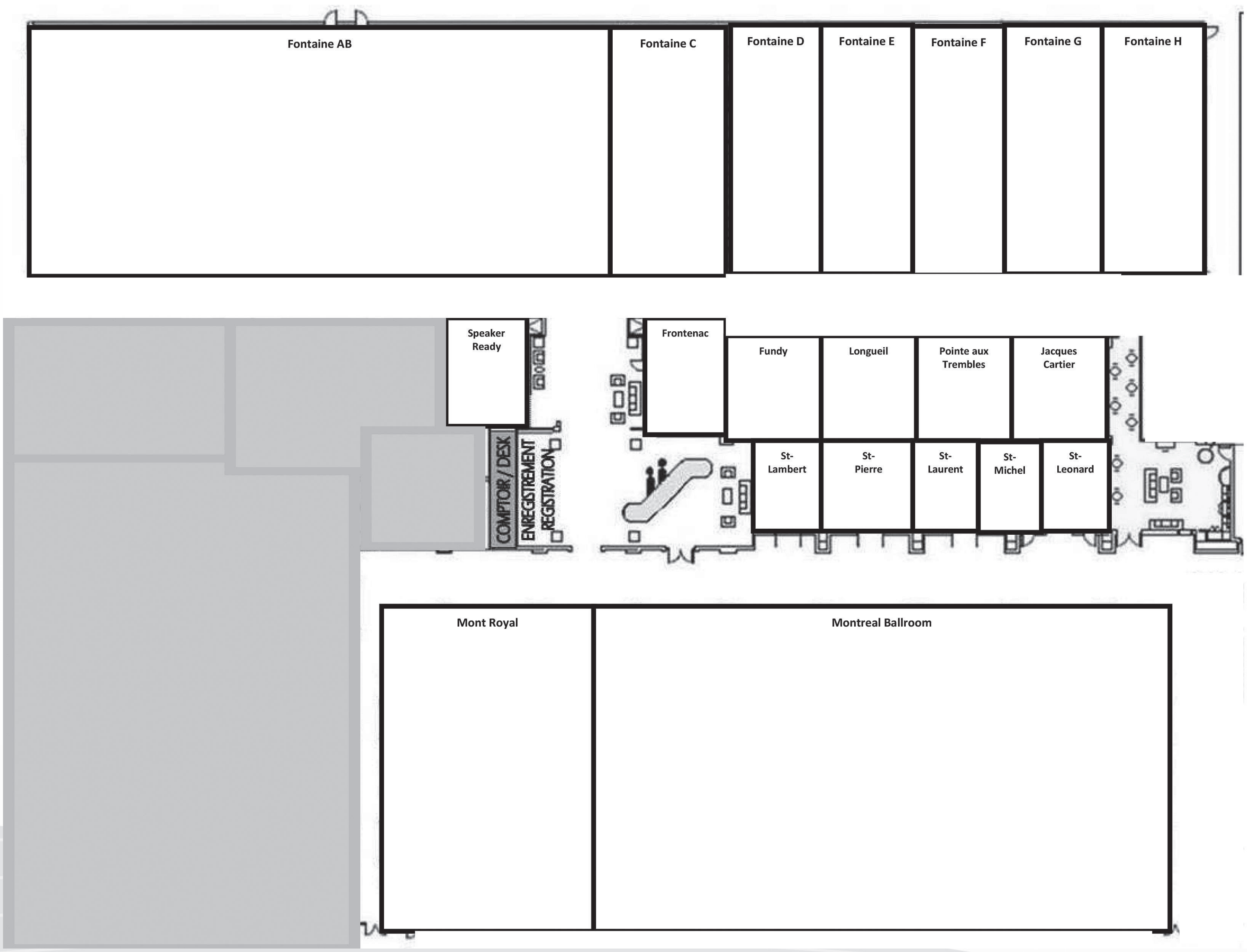
Floorplan



Monday, May 25, 2015 Pre-Conference Day

1:00pm – 5:00pm	**THE COMMONWEALTH FUND INTERNATIONAL HEALTH POLICY SURVEY (IHP)**	Fontaine H
1:00pm – 4:00pm	**FROM EVIDENCE TO CHANGE: A WORKSHOP ON WRITING EVIDENCE/ISSUE BRIEFS**	Fontaine F
2:00pm – 4:00pm	**PRIMARY HEALTHCARE THEME GROUP ANNUAL GENERAL MEETING**	Jacques Cartier
5:00pm – 6:00pm	**CONFERENCE PRIMER**	Fontaine G
6:00pm – 8:00pm	**WELCOME RECEPTION**	Salon Bonaventure

Tuesday, May 26, 2015 Day 1

6:15am – 7:30am	**CAHSPR ON THE MOVE** *(Meet in the hotel lobby)*	Lobby
7:00am – 8:00am	**BREAKFAST**	Fontaine AB
8:00am – 8:10am	**OPENING REMARKS**	Montreal Ballroom
8:10am – 8:20am	**OFFICIAL ABORIGINAL WELCOME**	Montreal Ballroom
8:20am – 8:30am	**WELCOME FROM THE CONFERENCE CO-CHAIRS**	Montreal Ballroom
8:30am – 8:35am	**RAPID FIRE PRESENTATION – The CHOICE Project: Engaging Older Adults in Healthcare Decision-Making**	Montreal Ballroom
8:35am – 9:45am	**KEYNOTE PRESENTATION – The French Health System: Insights From A High Performing System**	Montreal Ballroom
9:45am – 11:00am	**POSTER PRESENTATIONS** **(**Poster Presentations Guide – View pages 25)	Fontaine AB
11:00am – 11:15am	**TRANSITION TO NEXT SESSION**	
11:15am – 12:15pm	**SUB-PLENARY SESSIONS**	
	SP1 Health Care System Performance in Canada and the US: Challenges and Promise in Moving Toward Effective, Patient-Centered Care	Montreal Ballroom
	SP2 Strategies for Motivating Partnerships between Researchers and Research Users	Fontaine GH
	SP3 Mobilizing health research to achieve sustainable health	Mont Royal
12:15pm – 1:30pm	**NETWORKING LUNCH**	Fontaine AB
1:30pm – 2:45pm	**CONCURRENT SESSIONS A** **(**Concurrent Sessions Guide – View pages 18)	
	A1: Health Human Resources	Fontaine C
	A2: Health Reform I	Fontaine D
	A3: Primary Healthcare: Reform and performance	Fontaine E
	A4: Chronic Disease Management and Aging	Fontaine F
	A5: Knowledge Translation & Exchange	Fontaine G
	A6: Health Care Costs and Chronic Disease	Fontaine H
	A7: PANEL – What can nurses do to solve the primary care woes of Canadian healthcare systems?	Mont Royal
2:45pm – 3:15pm	**BREAK**	Fontaine AB
3:15pm – 3:20pm	**RAPID FIRE PRESENTATION – Quality Indicators for End-of-Life Care in Ontario**	Montreal Ballroom
3:20pm – 4:15pm	**KEYNOTE PRESENTATION – Health System Improvement In Australia: Knowledge Organizations As Enablers**	Montreal Ballroom
4:30pm – 6:00pm	**STUDENT THEME GROUP SPEED NETWORKING**	Mont Royal

Wednesday, May 27, 2015 Day 2

7:00am – 8:30am	**BREAKFAST**	Fontaine AB
7:30am – 8:20am	**HEALTH HUMAN RESOURCES THEME GROUP BUSINESS MEETING** (Breakfast available)	Longueil
8:30am – 8:35am	**RAPID FIRE PRESENTATION – Effects of Family Medicine Groups on visits to the emergency department among diabetics in Quebec between 2000 and 2011: a population-based segmented regression analysis of an interrupted time series**	Montreal Ballroom
8:35am – 9:45am	**KEYNOTE PRESENTATION – Alchian, Williams, Bookshelves and Cost-Effectiveness Thresholds: The Power of Multum in Parvo**	Montreal Ballroom
9:45am – 10:00am	**TRANSITION TO NEXT SESSION**	
10:00am – 11:15am	**CONCURRENT SESSIONS B** (Concurrent Sessions Guide – View pages xxx)	
	B1: Pharmaceutical Policy I	Fontaine C
	B2: Chronic Disease Management I	Fontaine D
	B3: Primary Healthcare and Access	Fontaine E
	B4: Chronic Disease Management II	Fontaine F
	B5: Access & Equity and Primary Healthcare	Fontaine G
	B6: Health Economics	Fontaine H
	B7: PANEL – Improving care for older adults and individuals with dementia in the French and Canadian health care systems: insights and challenges in evaluating policy	Mont Royal
11:15am – 12:15pm	**POSTER PRESENTATIONS** (Poster Presentations Guide – View pages 25)	Fontaine AB
12:15pm – 1:30pm	**NETWORKING LUNCH**	Fontaine AB
12:15pm – 1:30pm	**LUNCH WORKSHOP – Pan-Canadian Health Reform Analysis Network: How To Write A Health Reform Analysis And Get It Published**	Mont Royal
1:30pm – 2:45pm	**CONCURRENT SESSIONS C** (Concurrent Sessions Guide – View pages 18)	
	C1: Aging	Fontaine C
	C2: Aboriginal (Primary Healthcare & Access and Equity)	Fontaine D
	C3: Primary Healthcare and New Models	Fontaine E
	C4: Quality, Safety & Performance Measurement and Primary Care	Fontaine F
	C5: Quality, Safety & Performance Measurement	Fontaine G
	C6: Research Methods or Innovations	Fontaine H
	C7: PANEL – Knowledge Translation Across Health Disciplines: Lessons on Successful Engagement and Meaningful Impact. An SWG-Led Panel	Mont Royal
2:45pm – 3:15pm	**BREAK**	Fontaine AB
3:15pm – 4:30pm	**CONCURRENT SESSIONS D** (Concurrent Sessions Guide – View pages 18)	
	D1: Aging	Fontaine C
	D2: Access & Equity & Young	Fontaine D
	D3: Primary Healthcare (Cancer, Mental Illness, Alcohol)	Fontaine E
	D4: Chronic Disease Management	Fontaine F
	D5: Quality, Safety & Performance Measurement (Patient Experience or Care)	Fontaine G
	D6: Public Health	Fontaine H
	D7: PANEL – Pan-Canadian Real-world Health Data Network	Mont Royal
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5:00pm – 6:30pm	**MATERNAL & CHILD HEALTH THEME GROUP MEETING**	Longueil
7:00pm	**STUDENT SOCIAL & ACTIVITIES**	TBC

Thursday, May 28, 2015 Day 3

7:00am – 8:30am	**BREAKFAST**	Fontaine AB
8:30am – 9:30am	**SUB-PLENARY SESSIONS**	
	SP4 Building Systems-Level Evidence From The Mosaic of 12 Research Programs In The CIHR Signature Initiative On Community Based Primary Health Care (CBPHC Networking and Poster Session from 9:30am to 10:45am)	Mont Royal
	SP5 Prevention and Health Promotion in the Context of Health Reform and Budgetary Restrictions	Montreal Ballroom
	SP6 Towards People-Centered Health Systems: Novel Efforts To Support Public And Patient Engagement In Canada	Fontaine GH
9:30am – 9:45am	**TRANSITION TO NEXT SESSION**	
9:45am – 10:45am	**POSTER PRESENTATIONS** (Poster Presentations Guide – View pages 25)	Fontaine AB
10:45am – 11:00am	**TRANSITION TO NEXT SESSION**	
11:00am – 12:15pm	**CONCURRENT SESSIONS E** (Concurrent Sessions Guide – View pages 18)	
	E1: Health Reform II	Fontaine C
	E2: Access & Equity and Aging	Fontaine D
	E3: Primary Healthcare and Nursing	Fontaine E
	E4: Chronic Disease Management	Fontaine F
	E5: Health Economics	Fontaine G
	E6: Health Human Resources	Fontaine H
	E7: PANEL – Creating Capacity in Support of System Transformation in Ontario	Mont Royal
12:15pm – 1:30pm	**NETWORKING LUNCH & AWARDS PRESENTATION**	Montreal Ballroom
1:30pm – 2:45pm	**CONCURRENT SESSIONS F** (Concurrent Sessions Guide – View pages 18)	
	F1: Maternal Child Health & Mental Health	Fontaine C
	F2: Knowledge Translation & Exchange	Fontaine D
	F3: Primary Healthcare Linked with Secondary Care	Fontaine E
	F4: Health Economics (Costs)	Fontaine F
	F5: Quality, Safety & Performance Measurement and Chronic Disease Management	Fontaine G
	F6: Pharmaceutical Policy II	Fontaine H
	F7: PANEL – Long-Term Solutions: Fair and Sustainable Options for Financing Universal Long-Term Care in Canada	Mont Royal
	F8: PANEL – Models and Innovations of Primary Health Care: What works? In what ways? For whom? and What's next?	Montreal Ballroom
2:45pm – 3:15pm	**BREAK**	Fontaine AB
3:15pm – 3:20pm	**RAPID FIRE PRESENTATION – Factors associated with having or not having a family doctor**	Montreal Ballroom
3:20pm – 4:25pm	**KEYNOTE PRESENTATION – Is There A Future For Regionalization In Canada?**	Montreal Ballroom
4:25pm – 4:30pm	**CLOSING REMARKS & ADJOURNMENT**	Montreal Ballroom

Conference Agenda

Monday, May 25, 2015 Pre-Conference Day

1:00pm – 5:00pm	**THE COMMONWEALTH FUND INTERNATIONAL HEALTH POLICY SURVEY (IHP)** Sponsored by **CIHI** and **CIHR-IHSPR** This pre-conference workshop is intended for graduate and post-doctoral students, new investigators and policy makers who are interested in learning more about the International Health Policy survey and how to access and use the data to better understand health systems around the world. This session will feature experts: Michelle Doty (The Commonwealth Fund), Susan Brien (Health Quality Ontario) and Jean-Frédéric Levesque (Bureau of health information of New South Wales) as well as representatives of CIHI. Our experts will provide an orientation to the IHP Survey and the data collected, describe previous analyses and published results, and give workshop participants the opportunity to use a sample dataset.	Fontaine H
1:00pm – 4:00pm	**FROM EVIDENCE TO CHANGE: A WORKSHOP ON WRITING EVIDENCE/ISSUE BRIEFS** Coordinated by the **CAHSPR Student Working Group** Led by the McMaster Health Forum, this pre-conference workshop is intended for graduate students, post-doctoral trainees, and early career researchers who are interested in learning how to write evidence/issue briefs to influence policy development and affect positive change in health service delivery. This workshop will provide an introduction on how evidence/issue briefs are used as knowledge translation tools in various policy settings, and will describe the different types of knowledge and implementation considerations involved in preparing and effective brief. A practical component of the workshop will give attendees an opportunity to integrate learned concepts into developing their own evidence/issue brief.	Fontaine F
2:00pm – 4:00pm	**PRIMARY HEALTHCARE THEME GROUP ANNUAL GENERAL MEETING** Open to all participants interested in Primary Healthcare	Jacques Cartier
5:00pm – 6:00pm	**CONFERENCE PRIMER** Coordinated by the **CAHSPR Student Working Group** Presented by **Jeremy Veillard, Frank Markel, Denis Roy, Erin Strumpf** 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 Erin Strumpf and Denis Roy (2015 CAHSPR Conference Co-Chairs), as well as a student representative, 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.	Fontaine G
6:00pm – 8:00pm	**WELCOME RECEPTION**	Salon Bonaventure

Tuesday, May 26, 2015 Day 1

6:15am – 7:30am	**CAHSPR ON THE MOVE** *(Meet in the hotel lobby)* Coordinated by the **CAHSPR Student Working Group** Start your day with a brisk morning run or walk around downtown Montreal. 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 on our website.	Lobby
7:00am – 8:00am	**BREAKFAST**	Fontaine AB
8:00am – 8:10am	**OPENING REMARKS** Presented by **Jeremy Veillard**, President, CAHSPR	Montreal Ballroom
8:10am – 8:20am	**OFFICIAL ABORIGINAL WELCOME** Presented by **Amelia Tekwatonti McGregor**, Kahnawake Schools Diabetes Prevention Project; Community Advisory Board Member; Elder, Executive Committee	Montreal Ballroom
8:20am – 8:30am	**WELCOME FROM THE CONFERENCE CO-CHAIRS** Presented by **Denis Roy**, Vice-président, Science et gouvernance clinique, Vice-president, Science and clinical governance Institut national d'excellence en santé et service sociaux; **Erin Strumpf**, Associate Professor, McGill University	Montreal Ballroom
8:30am – 8:35am	**RAPID FIRE PRESENTATION – The CHOICE Project: Engaging Older Adults in Healthcare Decision-Making** Presented by **Jacobi Elliott**, PhD Candidate, University of Waterloo	Montreal Ballroom
8:35am – 9:45am	**KEYNOTE PRESENTATION**	Montreal Ballroom
	The French Health System: Insights From A High Performing System Presented by **Claude Évin**, director general, Agence régionale de santé, Île-de-France, former Solidarity, Health and Social Protection minister, and Chevalier de la légion d'honneur; **Antonia Maioni**, Professor, Department of Political Science, Institute for Health and Social Policy, McGill University; President of the Canadian Federation for the Humanities and Social Sciences; **Jean Rochon**, medical expert at INSPQ and former Québec Health minister This session will address key features on the French health system and outline its major strengths as well as some of the challenges it is currently dealing with. M. Evin will discuss his perspectives on some current system modernization initiatives and share his insights on how these might inform policy for Canada. This presentation will be followed by a panel discussion of lessons learned from the French health system and how these could inform health policy and system transformation in Canada.	
9:45am – 11:00am	**POSTER PRESENTATIONS** (Poster Presentations Guide – View pages 25)	Fontaine AB
11:00am – 11:15am	**TRANSITION TO NEXT SESSION**	

11:15am – 12:15pm **SUB-PLENARY SESSIONS**

SP1 Health Care System Performance in Canada and the US: Challenges and Promise in Moving Toward Effective, Patient-Centered Care

Montreal Ballroom

Moderated by **Erin Strumpf**, Associate Professor, Department of Economics, Department of Epidemiology, Biostatistics and Occupational Health, McGill University; **Uwe E. Reinhardt**, James Madison Professor of Political Economy, Professor of Economics and Public Affairs, Princeton University

Presented by **Eric Schneider**, Senior Vice President for Policy and Research, The Commonwealth Fund; **Ross Baker**, Director, Quality Improvement and Patient Safety, Institute of Health Policy, Management and Evaluation, University of Toronto

Sharing the North American continent, the US and Canadian health care systems have some notable differences but also face many challenges in common. The panelists will present past performance and promising developments in Canada and the US regarding high-quality, effective, and patient-centered care. New results from the Commonwealth Fund's study comparing performance in 11 OECD countries' health care systems will provide important context and data to nourish the discussion.

SP2 Strategies for Motivating Partnerships between Researchers and Research Users

Fontaine GH

Presented by **Alison Bourgon**, Manager, Knowledge Translation Strategy, Canadian Institutes of Health Research; **Nancy Kennedy**, Assistant Deputy Minister, Health System Strategy & Policy Division, Ontario Ministry of Health; **Jennifer Verma**, Senior Director, Collaboration for Innovation and Improvement, Canadian Foundation for Healthcare Improvement

- Integrated knowledge translation (IKT) is challenged by differing goals, practices and timelines of researchers and policy-makers.
- Research has largely described the IKT challenges faced by researchers, but there has been little exploration of how policy-makers and funders enable IKT.
- In this session policy-makers, funders and change managers will discuss how they promote, support, and facilitate IKT.
- This will reveal exemplary practices that can be widely employed, and provide researchers with insight on how to strengthen IKT.

SP3 Mobilizing health research to achieve sustainable health

Mont Royal

Presented by **Pernelle Smits**, Faculty of Business Administration, Laval University; **Marie Hélène Jobin**, Director, Pôle Santé, École des HÉC, University of Montréal; **Michel Clair**, president, Alliance santé Québec, Université Laval

Learning Across Jurisdictions

Quebec has lots to show the world about improving the healthcare system. In this session, participants will learn the results of three major initiatives:

- The IPCDC ten year project and its evaluation
- Using lean methods in healthcare
- How Alliance Sante Quebec uses research to lever social development

12:15pm – 1:30pm	**NETWORKING LUNCH**	Fontaine AB
1:30pm – 2:45pm	**CONCURRENT SESSIONS A** (Concurrent Sessions Guide – View pages 18)	
	A1: Health Human Resources	Fontaine C
	A2: Health Reform I	Fontaine D
	A3: Primary Healthcare: Reform and performance	Fontaine E
	A4: Chronic Disease Management and Aging	Fontaine F
	A5: Knowledge Translation & Exchange	Fontaine G
	A6: Health Care Costs and Chronic Disease	Fontaine H
	A7: PANEL – What can nurses do to solve the primary care woes of Canadian healthcare systems?	Mont Royal
2:45pm – 3:15pm	**BREAK**	Fontaine AB
3:15pm – 3:20pm	**RAPID FIRE PRESENTATION – Quality Indicators for End-of-Life Care in Ontario** Presented by **Symron Bansal**, Research Analyst, Health Quality Ontario	Montreal Ballroom

3:20pm – 4:15pm **KEYNOTE PRESENTATION** Montreal Ballroom

Health System Improvement In Australia: Knowledge Organizations As Enablers

Keynote presented by **Jean-Frédéric Levesque**, Chief executive officer at Bureau of health information of New South Wales, Sydney, Australia and Researcher, Centre hospitalier universitaire de Montréal Research Centre

Panelists: **Alan Katz**, Professor, Family Medicine and Community Health Sciences, Director of the Manitoba Centre for Health Policy; **Michel Clair**, Président, Alliance santé Québec, Former Chair, Commission sur le financement des services de santé (Commission Clair); **Kjeld Møller Pedersen**, Professor, Health Economics and Health Policy; Center of Health Economics Research, COHERE; University of Southern Denmark

After a brief review of the fields of expertise occupied by knowledge organizations on the international scene, Dr Levesque will depict how Australia has structured its own approach nationally. He will draw comparisons with the accomplishments of Canada in that respect and suggest possible foci for improvements. Panellists will share their views on institution-based strategies currently being explored across jurisdictions in Canada, with a view of accelerating knowledge and research uptake in order to better support policy, practice and health system improvement.

4:30pm – 6:00pm **STUDENT THEME GROUP SPEED NETWORKING** Mont Royal

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. Biographies for experts and leaders will be available on our website before the conference and student sign-up will occur on a first-come first-serve basis. 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.

Wednesday, May 27, 2015 Day 2

7:00am – 8:30am	**BREAKFAST**	Fontaine AB
7:30am – 8:20am	**HEALTH HUMAN RESOURCES THEME GROUP BUSINESS MEETING** (Breakfast available)	Longueil
8:30am – 8:35am	**RAPID FIRE PRESENTATION – Effects of Family Medicine Groups on visits to the emergency department among diabetics in Quebec between 2000 and 2011: a population-based segmented regression analysis of an interrupted time series** Presented by **Renee Carter**, PhD Candidate, McGill University	Montreal Ballroom
8:35am – 9:45am	**KEYNOTE PRESENTATION**	Montreal Ballroom
	Alchian, Williams, Bookshelves and Cost-Effectiveness Thresholds: The Power of Multum in Parvo **Hall Laureate Presentation, The Justice Emmett Hall Memorial Foundation** Presented by **Anthony Culyer**, Institute of Health Policy, Management and Evaluation, University of Toronto	
9:45am – 10:00am	**TRANSITION TO NEXT SESSION**	
10:00am – 11:15am	**CONCURRENT SESSIONS B** (Concurrent Sessions Guide – View pages 18)	
	B1: Pharmaceutical Policy I	Fontaine C
	B2: Chronic Disease Management I	Fontaine D
	B3: Primary Healthcare and Access	Fontaine E
	B4: Chronic Disease Management II	Fontaine F
	B5: Access & Equity and Primary Healthcare	Fontaine G
	B6: Health Economics	Fontaine H
	B7: PANEL – Improving care for older adults and individuals with dementia in the French and Canadian health care systems: insights and challenges in evaluating policy	Mont Royal
11:15am – 12:15pm	**POSTER PRESENTATIONS** (Poster Presentation Guide – View pages 25)	Fontaine AB
12:15pm – 1:30pm	**NETWORKING LUNCH**	Fontaine AB
12:15pm – 1:30pm	**LUNCH WORKSHOP** **Pan-Canadian Health Reform Analysis Network: How To Write A Health Reform Analysis And Get It Published** Presented by **Michel Grignon, François-Pierre Gauvin, Gregory Marchildon** & **Amélie Quesnel-Vallée** Documenting and publishing about Canadian health policy reform to facilitate cross-jurisdictional learning: how to use the HRO-ORS template to organize information and present it in a way that will help readers (academics, policymakers and stakeholders) understand, assess and compare healthcare reforms.	Mont Royal
1:30pm – 2:45pm	**CONCURRENT SESSIONS C** (Concurrent Sessions Guide – View pages 18)	
	C1: Aging	Fontaine C
	C2: Aboriginal (Primary Healthcare & Access and Equity)	Fontaine D
	C3: Primary Healthcare and New Models	Fontaine E
	C4: Quality, Safety & Performance Measurement and Primary Care	Fontaine F
	C5: Quality, Safety & Performance Measurement	Fontaine G
	C6: Research Methods or Innovations	Fontaine H
	C7: PANEL – Knowledge Translation Across Health Disciplines: Lessons on Successful Engagement and Meaningful Impact. An SWG-Led Panel	Mont Royal
2:45pm – 3:15pm	**BREAK**	Fontaine AB
3:15pm – 4:30pm	**CONCURRENT SESSIONS D** (Concurrent Sessions Guide – View pages 18)	
	D1: Aging	Fontaine C
	D2: Access & Equity & Young	Fontaine D
	D3: Primary Healthcare (Cancer, Mental Illness, Alcohol)	Fontaine E
	D4: Chronic Disease Management	Fontaine F
	D5: Quality, Safety & Performance Measurement (Patient Experience or Care)	Fontaine G
	D6: Public Health	Fontaine H
	D7: PANEL – Pan-Canadian Real-world Health Data Network	Mont Royal
4:45pm – 5:15pm	**THE JUSTICE EMMETT HALL MEMORIAL FOUNDATION ANNUAL GENERAL MEETING**	Mont Royal
5:00pm – 6:30pm	**MATERNAL & CHILD HEALTH THEME GROUP MEETING**	Longueil
7:00pm	**STUDENT SOCIAL & ACTIVITIES** Come join us for a relaxing evening of good company and great conversation at the annual CAHSPR-SWG Student Social. Location is to be determined, but will be within walking distance of the conference hotel.	TBC

Thursday, May 28, 2015 Day 3

7:00am – 8:30am	**BREAKFAST**	Fontaine AB
8:30am – 9:30am	**SUB-PLENARY SESSIONS**	
	SP4 Building Systems-Level Evidence From The Mosaic of 12 Research Programs In The CIHR Signature Initiative On Community Based Primary Health Care Moderated by **Jeannie Haggerty**, CBPHC Innovation Team PI and Common Indicators Group, McGill University Presented by **Robyn Tamblyn**, Scientific Director, Institute for Health Services and Policy Research, CIHR; **Luc Boileau**, CEO, Institut national d'excellence en santé et en services sociaux; **Astrid Brousselle**, Canada Research Chair, Université de Sherbrooke; **Jean-Frédéric Levesque**, Chief executive officer at Bureau of health information of New South Wales, Sydney, Australia and Researcher, Centre hospitalier universitaire de Montréal Research Centre; **Alan Katz**, Professor, Family Medicine and Community Health Sciences, Director of the Manitoba Centre for Health Policy; **Grant Russell**, Head of School of Primary Health Care, Professor of General Practice Research, Monash University, Melbourne Australia ***Learning From Others: Across Disciplines*** ▪ How have the CIHR Innovation Team Grants spurred interdisciplinary research? ▪ What are the lessons for policy makers? **Join us!** **CBPHC Networking and Poster Session** (immediately following the sub-plenary session from 9:30am – 10:45am)	Mont Royal
	SP5 Prevention and Health Promotion in the Context of Health Reform and Budgetary Restrictions The current context of health reforms, compounded by budgetary constraints, is clearly troubling to the public health community, especially when it comes to sustaining strong prevention and promotion functions. This sub-plenary seeks to give thought to approaches and conditions that support positive population health outcomes while reconciling several objectives. Plenary discussion: What is the potential of these innovations ? Other initiatives that would support positive population health outcomes whilst reconciling several objectives? ▪ **The Triple Aim Approach as a tool to reflect on health system reforms and integrated governance issues: potential and pitfalls** Presented by **Dr. Adalsteinn Brown**, Director, Institute of Health Policy, Management and Evaluation University of Toronto ▪ **Développer le continuum d'intervention pour la population âgée : réflexion autour d'une évaluation dans trois milieux locaux** Presented by **Dr. Denise Aubé**, Médecin conseil, Direction Analyse et évaluation des systèmes de soins et services, Institut national de santé publique du Québec Commentaire : **Dr. Réjean Hébert**, Université de Montréal, Département d'administration de la santé (ESPUM) et IRSPUM Session coordinator/chair: **Lucie Richard**, Université de Montréal, Faculté des sciences infirmières et IRSPUM	Montreal Ballroom
	SP6 Towards People-Centered Health Systems: Novel Efforts To Support Public And Patient Engagement In Canada Presented by **François-Pierre Gauvin**, McMaster Health Forum; **Marie-Pascale Pomey**, Université de Montréal; **Isabelle Ganache**, Éthicienne, Commissaire à la santé et au bien-être, Professeure adjointe de clinique, Université de Montréal; **Alexandre Berkesse**, Université de Montréal; **Julia Abelson**, McMaster University This sub-plenary session will showcase novel efforts to support public and patient engagement in a variety of health-system organizations in Canada.	Fontaine GH
9:30am – 9:45am	**TRANSITION TO NEXT SESSION**	
9:45am – 10:45am	**POSTER PRESENTATIONS** (Poster Presentations Guide – View pages 25)	
10:45am – 11:00am	**TRANSITION TO NEXT SESSION**	
11:00am – 12:15pm	**CONCURRENT SESSIONS E** (Concurrent Sessions Guide – View pages 18)	
	E1: Health Reform II	Fontaine C
	E2: Access & Equity and Aging	Fontaine D
	E3: Primary Healthcare and Nursing	Fontaine E
	E4: Chronic Disease Management	Fontaine F
	E5: Health Economics	Fontaine G
	E6: Health Human Resources	Fontaine H
	E7: PANEL – Creating Capacity in Support of System Transformation in Ontario	Mont Royal

12:15pm – 1:30pm	**NETWORKING LUNCH & AWARDS PRESENTATION** ***Rising Star Award*** (Sponsored by **Canadian Institutes for Health Research**) ***Article of the Year*** (Sponsored by **Canadian Institutes for Health Research**) ***Jack Boan Student Essay Awards*** (Sponsored by **The Justice Emmett Hall Memorial Foundation**) ***Student Poster Awards*** (Sponsored by **Canadian Institutes for Health Research**) ***Pat Martens Memorial Student Prize in Maternal & Child Health Research*** (Sponsored by **CAHSPR Maternal & Child Health Theme Group**) ***Primary Healthcare Student Presentation Award*** (Sponsored by **CAHSPR Primary Healthcare Theme Group**) ***2015 - 2016 Canadian Harkness Fellow*** (Announced by **STEPHEN SAMIS**, Vice-President, Programs, **Canadian Foundation for Healthcare Improvement**) ***Health Human Resource Theme Group Awards*** (Sponsored by **CAHSPR Health Human Resources Theme Group**)	Montreal Ballroom
1:30pm – 2:45pm	**CONCURRENT SESSIONS F** (Concurrent Sessions Guide – View pages 18)	
	F1: Maternal Child Health & Mental Health	Fontaine C
	F2: Knowledge Translation & Exchange	Fontaine D
	F3: Primary Healthcare Linked with Secondary Care	Fontaine E
	F4: Health Economics (Costs)	Fontaine F
	F5: Quality, Safety & Performance Measurement and Chronic Disease Management	Fontaine G
	F6: Pharmaceutical Policy II	Fontaine H
	F7: PANEL – Long-Term Solutions: Fair and Sustainable Options for Financing Universal Long-Term Care in Canada	Mont Royal
	F8: PANEL – Models and Innovations of Primary Health Care: What works? In what ways? For whom? and What's next?	Montreal Ballroom
2:45pm – 3:15pm	**BREAK**	Fontaine AB
3:15pm – 3:20pm	**RAPID FIRE PRESENTATION – Factors associated with having or not having a family doctor** Presented by **Sylvie Provost**, Medical Advisor, Montreal Public Health Department	Montreal Ballroom
3:20pm – 4:25pm	**KEYNOTE PRESENTATION**	Montreal Ballroom
	Is There A Future For Regionalization In Canada? Presented by **Jean Louis Denis**, École nationale d'administration publique (ENAP); **Brian Postl**, Dean of Medicine; Dean & Vice-Provost, Faculty of Health Scienes, University of Manitoba; **Chris Power**, CEO, Canadian Patient Safety Institute Building on recent collaborative work, Jean Louis Denis will review the changing landscape of regionalization across Canada over the last decade. Often seen as the de facto health policy in Canada, a variety of regionalization policies have been implemented across provinces. The plenary will address the hopes of regionalization, its key accomplishments and the main barriers it faces. This review will be concluded by outlining issues that ought to be addressed in the pursuit of the Triple Aim across regional territories. Our senior panellists will discuss issues and future directions as they relate to the dynamics of the provincial health system governance. The reform currently being implemented in Quebec will be specifically considered in light of the lessons learned.	
4:25pm – 4:30pm	**CLOSING REMARKS & ADJOURNMENT**	Montreal Ballroom

Keynote Speakers

CLAUDE EVIN began his career as a special-education teacher in a foster care agency from 1971 to 1978. Elected to the National Assembly from 1978 to 1988, from 1991 to 1993 and from 1997 to June 2007, he served in various capacities including: Chairman of the Committee on Culture, Family and Social Affairs (1981 to 1986), Vice President of the National Assembly (1986-1987) and rapporteur for numerous pieces of legislation, particularly in the areas of health and social protection. During his tenure as Representative to the Council of Europe's Parliamentary Assembly from 1997 to 2007, he worked on the implementation of the European Social Charter. As the Minister of Health and Social Affairs from 1988 to 1991, he was the architect of various public health reforms and health system restructuring (the 1991 Hospital Act, additional coverage...). He was a member of the Economic and Social Council from 1994 to 1997 and an adjunct professor at the Paris 8 University from 1993 to 1997 and a consultant to the International Labour Office for which he carried out several missions relating to health and social protection policies in Africa. Locally elected from 1977 to 2008, he served various terms in local authorities. He launched the GIP SPSI and in a 2001 report, he noted the lack of understanding regarding the French cooperation activities in the areas of health and social protection. He has held various leadership positions in institutions and associations, in particular as chairman of the French Hospital Federation from 2004 to 2009. He is President of the Institut des Hautes Etudes de Protection Sociale (Institute of Higher Learning in Social Protection Studies). Barrister at the Paris Bar, he was a partner of the Jacques Barthélémy social law firm and an associate professor at Nantes University (Faculty of Law) until 30 September 2009, when he was appointed head of business forecasting for the Regional Health Agency of Ile de France. Moreover, he has held the position of Director General of the Regional Health Agency of Ile de France since April 1st 2010.

MICHEL CLAIR is a lawyer and member of the Quebec Bar and is a certified business administrator by the Administrateur de sociétés certifié (ASC). Michel Clair has a long history of leadership in the public and private administration. He assumed the responsibilities of the Minister and Deputy Minister in various ministries of the Government of Québec, a Crown corporation officer, employer association and for 13 years he served as President of Sedna Health Group Inc. He joined the Sedna Health Group in 2001 as President and Chief Operating Officer and became CEO the following year. Previously, he was Executive Vice President at Hydro-Québec for 3 years. In 2000 and 2001, Mr. Clair chaired the Commission d'étude sur les services de santé et les services sociaux. The recommendations made by this commission of study in health and social services in Quebec are still to this day a source of reference for several public and private decision-makers and experts. Mr. Clair sits on the Board of Directors of Xplornet Communications Inc. and TechnoParc de Montréal. Mr. Clair is involved in his community on many different levels. He is Chairman of the Board for the Association des ressources intermédiaires d'hébergement du Québec, administrator of the INNOVAge project, a regular collaborator to the Collège des administrateurs de société, a leader in administrator training programs, a scout ambassador, and a valuable member of various advisory committees. Michel Clair holds a DEC Collège Jean-de-Brébeuf, diploma of the first degree in law from the University of Sherbrooke, completed a Masters in Criminology from the University of Montreal and is a graduate of the College of Corporate Directors.

TONY CULYER is emeritus professor of economics at York (England); Senior Fellow at the Institute of Health Policy, Management and Evaluation at the University of Toronto; Adjunct Scientist, Institute for Work and Health, Toronto; Chair, NICE International Advisory Group, London, England; and Distinguished Visiting Scholar, University of the Witwatersrand, South Africa. He was the founding Organiser of the Health Economists' Study Group. For 33 years he was the founding co-editor, with Joe Newhouse, of Journal of Health Economics. He was founding Vice Chair of the National Institute for Health and Care Excellence (NICE). He is Editor-in-Chief of the on-line Encyclopaedia of Health Economics. He was responsible for the 1994 report that led to the redesign of the NHS's R&D system. For many years he was chair of the Department of Economics & Related Studies at York and, for six of them, was also deputy vice-chancellor. In Ontario he helped to found the Citizens' Council and the Occupational Cancer Research Centre. He is the 2015 recipient of the Baxter Foundation's William B. Graham Prize for Health Services Research, jointly with Alan Maynard, another York health economist. He has published widely, mostly in health economics. The third edition of his The Dictionary of Health Economics (Edward Elgar) came out in 2014. A collection of his non-technical essays called The Humble Economist is available on-line free of charge.

JEAN LOUIS DENIS is Full Professor at the École Nationale d'Administration Publique (ÉNAP) and holds the Canada research chair on governance and transformation of health care organizations and systems at ÉNAP. He is a visiting professor at Euromed Management (Marseille) and researcher at the Institut de recherche en santé publique de l'Université de Montréal. He pursues research on governance and change process in health care organizations and systems. His current research looks at integration of care and services, health care reforms, medical leadership and leadership in professional organizations, strategies for health care improvement and the role of scientific evidence in the adoption and implementation of clinical and managerial innovations. He is a member of the Royal Society of Canada, fellow of the Canadian Academy of Health Sciences and was chair of the advisory board of CIHR's Institute of Health Services and Policy Research (2009-2012). He was the founding academic coordinator of the FORCES/EXTRA initiative from 2003 to 2007, a training program which aims at developing Canada's health managers' competencies in research use. Recent papers have been published in Journal of Health Politics, Policy and Law, Organization Science, Milbank Quarterly and Administration and Society. He was the principal investigator of a CIHR team grant on the theme of Health system reconfiguration (2008-2013). From March 2015, he is appointed as visiting professor at the Department of Management, King's College London.

ALAN KATZ has been appointed as Director of the Manitoba Centre for Health Policy (MCHP), Department of Community Health Sciences, College of Medicine, Faculty of Health Sciences, University of Manitoba. Dr Katz is a family physician and health services researcher who is the nominated principle investigator for research funding of over $3m and a co-investigator for over $10m worth of research funded by the Canadian Institutes for Health Research (CIHR), Research Manitoba, and the Heart and Stroke Foundation. He has extensive experience in clinical practice, primary healthcare research, quality indicators of care, service delivery models, and health reform initiatives; and has led multiple successful research teams. He has served as the Associate Director for Research at MCHP for the past 8 years.

JEAN FREDERIQUE LEVESQUE joined the Bureau of Health Information in March 2013 as Chief Executive. Prior to his arrival in Australia, Dr Levesque held senior positions responsible for publicly reporting information about the Canadian health system. He is a member of the Strategic Analytic Advisory Committee of the Canadian Institute of Health Information. He was previously Scientific Director, Analyses and Evaluation of Health Systems at the National Institute of Public Health and the inaugural Deputy Commissioner, Performance Appraisal and Analysis at the Health and Welfare Commission in Quebec. In 2011-12, he was a Visiting Academic at the University of Melbourne. Dr Levesque's research focuses on healthcare performance, particularly in terms of how different models of care impact on patient outcomes and experiences of care, and on the analysis of Primary Care Reform. Dr Levesque is a Conjoint Professor at the Centre for Primary Health Care and Equity of the University of New South Wales. He is a Fellow of the Royal College of Physicians of Canada and has a Doctorate in Public Health, a Masters in Community Health and a medical degree from the University of Montreal, Canada.

ANTONIA MAIONI holds a cross-appointment as Professor in the Department of Political Science and the Institute for Health and Social Policy at McGill University. She also teaches in Fundamentals of Medicine & Dentistry in the Faculty of Medicine and in the International Masters in Health Leadership program in the Desuatels Faculty of Management, and is a member of the Research Group in Health and Law in the Faculty of Law. She is a member of the Research Council of the Canadian Institute for Advanced Research (CIFAR) and the College of Reviewers for the Canadian Institutes for Health Research (CIHR). She holds a B.A. from Université Laval, an M.A. from the Norman Paterson School of International Affairs at Carleton, and a Ph.D. from Northwestern University. She has held visiting appointments at Columbia's Mailman School of Public Health, Harvard's Center for European Studies, Duke University, and the European University Institute. Professor Maioni's research has been supported by CIHR, SSHRC, and the Max Bell Foundation. Her most recent publications include Health Care in Canada (Oxford University Press, 2014).

KJELD MØLLER PEDERSEN is professor of health economics and health policy at the University of Southern Denmark. Apart from his academic career he has spent four years as CEO for a county health service and nine years as an executive vice president of the LEGO Group. He has been member of several government committees. In 2002-2003 he chaired a government advisory commission on the future organization of the Danish health care system, and is currently a member of an expert committee that advices government on hospital investments. He is a member of several boards, e.g. chairman of the board the National Research Centre for the Working Environment, Statistics Denmark, and chairman of the board for the Epilepsy Hospital Filadelfia. He has written or co-authored 19 books, 55 book chapters, and 100+scientific articles, and 100+ articles in newpapers and the like. He has published on issues in pharmaceutical economics, valuation of health, economic evaluation, health insurance, transaction costs economics applied to health economics and the design and evaluation of health care systems and health care reforms.¨He has also published extensively on Danish health policy issues.

BRIAN POSTL – Dr. Brian Postl's five-year term as Professor and Dean, Faculty of Medicine, began July 1, 2010. Dr. Postl was additionally appointed Dean, Faculty of Health Sciences and Vice-Provost (Health Sciences) effective February 1, 2014, and his term was extended by two years to 2017. Dr. Postl is a graduate of the University of Manitoba. He received his doctor of medicine degree in 1976 and the Royal College Fellowship in Community Medicine and in Pediatrics in 1981 and 1982, respectively. He was the founding president and CEO of the Winnipeg Regional Health Authority (WRHA), a position he held for 10 years. Dr. Postl has served as head of Pediatrics and Child Health and as head of Community Health Sciences at the University of Manitoba. He has also served as director of the J.A. Hildes Northern Medical Unit, a division of community and northern medicine, and as director of the Faculty of Medicine's community medical residency program. His research, published works and professional involvement focus on Aboriginal child health, circumpolar health and human resource planning. His contributions in these areas, combined with his experience as a visiting pediatrician to communities in northern Manitoba and Nunavut, contributed to him earning the Canadian Association of Pediatric Health Centre's Child Health Award of Distinction in 2006 and the Inter-Professional Association on Native Employment's Champion of Aboriginal Employment award in 2007. Dr. Postl serves on a number of committees and boards of provincial and national associations, foundations, institutes and other organizations. He was inducted as a fellow in the Canadian Academy of Health Sciences in 2011 and invested in the Order of Manitoba in 2012. In June 2014, Dr. Postl was appointed chair of Research Manitoba (RM), a new research funding organization with a $17-million budget in 2014/15. It brings together four major provincial research funding programs under one umbrella.

CHRIS POWER – What began as a desire to help those in need 30 years ago has evolved into a mission to improve the quality of healthcare for all Canadians. Chris Power's journey in healthcare began at the bedside as a front-line nurse. Since then, she has grown into one of the preeminent healthcare executives in Canada. Her experiences, her success, and her values have led her to the position of CEO of the Canadian Patient Safety Institute. Previously, Chris served for eight years as president and CEO of Capital Health, Nova Scotia, with an annual operating budget of approximately $900 million, and 12,000 staff. Under Chris's leadership Capital Health achieved Accreditation with Exemplary Status in 2014 with recognition for 10 Leading Practices. Chris holds a Bachelor of Science in Nursing from Mount Saint Vincent University and a Masters in Health Services Administration from Dalhousie University. She is a Certified Health Executive with the Canadian College of Health Service Executives, and holds a Fellowship in Management for Executive Nurses from the Wharton School, University of Pennsylvania. In 2003, she received the Award for Excellence and Innovation from the Canadian College of Health Services Executives, and in 2007 received an Award of Excellence from the Halifax Progress Club. She was named one of Canada's Top 100 Most Powerful Women in the Public Sector Category three years in a row from 2007-2009. In 2010 she was named one of the Top 50 CEO's in Atlantic Canada. Chris is also involved in a number of collaboratives with the Canadian Foundation for Healthcare Improvement. She also holds significant governance roles including Co-Chair of HealthCareCAN, Chair of the Canadian Partnership Against Cancer, Canadian Institutes of Health Research Governing Council, and Board Member of Canadian Association for Health Services and Policy Research. Most recently Chris participated as a member of the federal advisory panel on healthcare innovation and through this role has gained even greater insight into the many pan-Canadian organizations that will be beneficial in forming partnerships, leveraging expertise and advancing the goals of CPSI. With all of the accolades and responsibilities, Chris has maintained her strong sense of self and credits her love of family, faith and her gift of singing for keeping her grounded.

JEAN ROCHON has worked in the field of training, research and public health. He served as Director of the Department of Social and Preventive Medicine and Dean of the Faculty of Medicine at Laval University. After heading a Commission of inquiry on health and social services, he worked with the World Health Organization (WHO). As a member of the Government of Quebec, he was the Minister of Health and Social Services, Minister of Research, Science and Technology and Minister of Employment, Social Solidarity and Labour. He holds a law degree (LL.B) from the University of Montreal, a medical degree (MD) from Laval University and a doctorate in public health (DrPH) from Harvard University. He is Professor Emeritus at Laval University and works as a consultant with the National Public Health Institute of Quebec (INSPQ).

Concurrent Sessions At-a-Glance

Séances simultanées en un coup d'œil

Tuesday, May 26, 2015 – 1:30pm - 2:45pm SESSION A
Le mardi 26 mai 2015 – 13 h 30 - 14 h 45 SÉANCE A

A1 HEALTH HUMAN RESOURCES / RESSOURCES HUMAINES EN SANTÉ

Fontaine C

A1.1	Conceptualizing regulated health professionals' competence in the workplace
A1.2	British Columbia's Health Care Worker Influenza Control Policy: A collaborative human resources/labour relations solution to a health care challenge
A1.3	An interactive learning experience for learners and practitioners to enhance collaborative practice across disciplines and jurisdictions
A1.4	Nurse-Led Care Transitions Interventions: A Strategy to Improve Health System Integration and Performance

A2 HEALTH REFORM / RÉFORME DES SOINS DE SANTÉ I

Fontaine D

A2.1	Procurement as an instrument of health policy: What are we asking, what can it do?
A2.2	Policy Options for Moving Team Based Primary Health Care Forward: Lessons from a Comparative Policy Analysis of Three Provinces
A2.3	Measuring Health Research Funding Impact in Ontario: The Health System Research Fund (HSRF) Impact Assessment Framework
A2.4	Are There Long-term Academic Benefits of Full-Day Kindergarten? A PATHS Equity for Children Project

A3 PRIMARY HEALTHCARE: REFORM AND PERFORMANCE / SOINS DE SANTÉ PRIMAIRES : RÉFORME ET RENDEMENT

Fontaine E

A3.1	Does Having A Usual Family Medicine Physician Influence Hospitalization And Emergency Department Visit Rates?
A3.2	Paying for Primary Care: Payment Reform and Primary Care Physician Behaviour in Ontario
A3.3	The impact of Quebec primary healthcare (PHC) reform on continuity of care
A3.4	A conceptual framework for primary care performance measurement and reporting

A4 CHRONIC DISEASE MANAGEMENT AND AGING / GESTION DES MALADIES CHRONIQUES ET VIEILLISSEMENT

Fontaine F

A4.1	Improving Care and Support for Unpaid Caregivers in Ontario: Findings from a Citizen Panel
A4.2	The Relationship Between Multimorbidity and Causes of Hospital Readmissions at 30 Days And One Year
A4.3	An evaluation of the experiences of Parkinson Society Saskatchewan members and their caregivers
A4.4	Predictors of six-month mortality subsequent to chronic dialysis initiation among an older adult population

A5 KNOWLEDGE TRANSLATION AND EXCHANGE / TRADUCTION ET ÉCHANGE DE CONNAISSANCES

Fontaine G

A5.1	Modelling the retirement timing of Canadian nurses using a panel survey
A5.2	The Impact Of Legislation On Expanded Scopes Of Practice: Prescribing by Optometrists and Pharmacists and Test Ordering by Physiotherapists in Ontario
A5.3	Part-time Nurse Faculty Intent to Remain Employed in Academia
A5.4	Diversity in Health Human Resources – Working with Employers towards Integration of Internationally Educated Nurses (IENs) into the Workforce

A6 HEALTH CARE COSTS AND CHRONIC DISEASE / LE COÛT DES SOINS DE SANTÉ ET DES MALADIES CHRONIQUES

Fontaine H

A6.1	A cause for discomfort – cost and use of healthcare by Ontarians with chronic pain
A6.2	Long-term physician costs associated with obesity
A6.3	Healthcare costs for 17 chronic conditions in Ontario
A6.4	Projection of health care costs at the end-of-life: An exploratory cost analysis by health care sectors in Canada, from 2015 to 2031

A7 PANEL / PRÉSENTATION EN PANEL

Mont Royal

A7	What can nurses do to solve the primary care woes of Canadian healthcare systems? Comment les infirmières peuvent-elles résorber les dysfonctionnements en soins primaires des systèmes de santé canadiens ?

Wednesday, May 27, 2015 – 10:00am - 11:15am SESSION B
Le mercredi 27 mai 2015 – 10 h 00 - 11 h 15 SÉANCE B

B1 PHARMACEUTICAL POLICY / POLITIQUE PHARMACEUTIQUE I
Fontaine C

B1.1 Exploring the effect of cost on adherence to prescription medicines from the patient’s perspective

B1.2 Elderly patients’ risk of receiving potentially inappropriate prescriptions: a population-based study of prevalence and determinants in British Columbia, Canada

B1.3 A time-trend economic analysis of cancer drug trials

B1.4 Cost-Drivers of Public Drug Plans in Canada

B2 CHRONIC DISEASE MANAGEMENT I / GESTION DES MALADIES CHRONIQUES I
Fontaine D

B2.1 Impact of Telehomecare on patients’ quality of life and disease-management skills

B2.2 Implementation and evaluation of an integrated interdisciplinary primary care program for the management of low back pain

B2.3 Agir sur sa santé: an evaluation-informed integrated care framework for the prevention and management of cardio-metabolic chronic diseases in primary care

B2.4 Differences and Similarities in Facilitators and Barriers of Chronic Disease Prevention and Management Programs in Two Canadian Provinces in the Context of a Realist Synthesis

B3 PRIMARY HEALTHCARE AND ACCESS / SOINS DE SANTÉ PRIMAIRES ET ACCÈS
Fontaine E

B3.1 Access to Primary Health Care and Utilization of Walk In Clinics and Emergency Rooms in Ontario

B3.2 First contact access to family physicians for patients requiring narcotics. Findings from the MAAP-NS: Models and Access Atlas to Primary Care Providers in Nova Scotia Study

B3.3 Expanding after hours primary care services in a disadvantaged region in Australia: Insights for policy and practice

B3.4 Reconciling the downsides of screening: Mothers’ experiences with false positive newborn screening results for cystic fibrosis

B4 CHRONIC DISEASE MANAGEMENT II / GESTION DES MALADIES CHRONIQUES II
Fontaine F

B4.1 Substance-related and addictive disorders among Ontario adults with developmental disabilities: a population-based study

B4.2 Impact of Transition from Pediatric to Adult Care on Health Services Utilization in Patients with Inflammatory Bowel Disease (IBD): A Population-Based Study

B4.3 Integration of Cancer Care in the Management of Complex Patients

B4.4 Post-discharge physician visits and readmission rates in patients with schizophrenia

B5 ACCESS & EQUITY AND PRIMARY HEALTHCARE / ACCÈS, ÉQUITÉ ET SOINS DE SANTÉ PRIMAIRES
Fontaine G

B5.1 Favoring timely and appropriate patient evaluation and management in specialized care through effective triage and prioritization

B5.2 Are home visiting programs for at-risk children effective at reducing population level health and social disparities? A PATHS Equity for Children project

B5.3 Improving access to primary health care for vulnerable populations: A typology of components of organizational interventions to inform decision-making

B5.4 Progress in closing the Gap in British Columbia

B6 HEALTH ECONOMICS / ÉCONOMIE DE LA SANTÉ
Fontaine H

B6.1 Is the National Surgical Quality Improvement Program Cost-effective: A Systematic Review

B6.2 The Interpretation of Health Care Need Among the General Public: An Empirical Investigation using a Discrete-Choice Approach

B6.3 Canadians’ polarized constructs of need: Qualitative analysis of responses to a population-based discrete-choice experiment

B6.4 Cost-Utility Analysis of Robotic-Assisted versus Open Radical Prostatectomy in Patients with Clinically Localized Prostate Cancer in Ontario

B7 PANEL / PRÉSENTATION EN PANEL
Mont Royal

B7 Improving care for older adults and individuals with dementia in the French and Canadian health care systems: insights and challenges in evaluating policy interventions

Améliorer les soins dispensés aux personnes âgées et aux personnes atteintes de démence dans les systèmes de soins de santé canadiens et français : perspectives et défis en matière d’évaluation des politiques

Wednesday, May 27, 2015 – 1:30pm - 2:45pm SESSION C
Le mercredi 27 mai 2015 – 13 h 00 - 14 h 45 SÉANCE C

C1 AGING / VIEILLISSEMENT

Fontaine C

C1.1	Distribution and Utilization of Palliative Care Across Ontario's Health Care Settings: A Retrospective
C1.2	Values Talk about Patient Care Transition Policy: what values are informing the policy discourse?
C1.3	L'intervention d'autonomisation des personnes en perte d'autonomie liée au vieillissement
C1.4	Burden of treatable symptoms at end of life in nursing home residents: Relation to modifiable features of work environment

C2 ABORIGINAL (PRIMARY HEALTHCARE & ACCESS AND EQUITY) / AUTOCHTONES (SOINS DE SANTÉ PRIMAIRES & ACCÈS ET ÉQUITÉ)

Fontaine D

C2.1	Negotiation, Reciprocity and Reality: the experience of collaboration in the "Innovation in Community-based Primary Health Care (CBPHC) Supporting Transformation in the Health of First Nation and rural/remote communities in Manitoba (iPHIT)" program of research
C2.2	The Health Status of Canada's First Nations Population: Re-conceptualizing determinants of health
C2.3	Aboriginal Health Policy-An Analysis of Ontario's Aboriginal Healing and Wellness Strategy, 20 Years Later
C2.4	First Nations and the Health Service Divide Beyond Medicare: Provincial and Federal Coverage for the Diagnosis and Treatment of Sleep Apnea

C3 PRIMARY HEALTHCARE AND NEW MODELS / SOINS DE SANTÉ PRIMAIRES ET NOUVEAUX MODÈLES

Fontaine E

C3.1	Do multidisciplinary primary care teams impact health care utilization and costs for patients with multiple chronic conditions? Evidence from Quebec's Family Medicine Groups
C3.2	La qualité des soins est-elle meilleure dans les nouveaux modèles de soins pluridisciplinaires au Québec? Une étude du respect des lignes directrices de trois maladies chroniques en groupes de médecine de famille (GMF)
C3.3	Factors Associated with Patient Experience in Ontario's Family Health Teams (FHTs)
C3.4	Should I Stay or Should I Go? Factors Associated with Family Physicians' Decision to Quit New Primary Care Teams in Quebec

C4 QUALITY, SAFETY & PERFORMANCE MEASUREMENT AND PRIMARY CARE / QUALITÉ, SÉCURITÉ ET MESURE DU RENDEMENT ET SOINS PRIMAIRES

Fontaine F

C4.1	Estimating organ donor potential: a comparable tool to track performance, identify gaps and help save lives
C4.2	Do patients attending different models of primary care in Winnipeg differ in complexity?
C4.3	An Examination of Two Alberta Strategic Clinical Networks Through a Knowledge Translation Lens
C4.4	Risk Communication and Values Clarification in Primary Care: A Descriptive Study

C5 QUALITY, SAFETY & PERFORMANCE MEASUREMENT / QUALITÉ, SÉCURITÉ ET MESURE DU RENDEMENT

Fontaine G

C5.1	Do indicators of health system performance for older adults change over time? An analysis of multiple frail cohorts
C5.2	Experiences of an emergency department visit among patients aged 75 and over
C5.3	High Users of Acute Care Services - Who Are They? Assessing Variability across Canada
C5.4	The Influence of Primary Care, Specialist, and Home Care Services utilization on Emergency Department use among Home Care Clients

C6 RESEARCH METHODS OR INNOVATIONS / MÉTHODES DE RECHERCHE OU INNOVATIONS

Fontaine H

C6.1	A Comparison of Comorbidity Measures for Predicting Healthcare Utilization in Cancer Patients
C6.2	Quality of Hospital Discharge Abstract Database over Time
C6.3	The Flow – An innovative application developed by the McGill University Health Center allowing patient-centered communication by physicians and nurses using their personal smartphones
C6.4	Strengthening Public and Patient Involvement in Health Technology Assessment

C7 PANEL / PRÉSENTATION EN PANEL

Mont Royal

C7	Knowledge Translation Across Health Disciplines: Lessons on Successful Engagement and Meaningful Impact. An SWG-Led Panel. Application des connaissances dans toutes les disciplines de la santé : enseignements sur la participation réussie et les incidences véritables. Dirigé par le GTÉ.

Wednesday, May 27, 2015 – 3:15pm - 4:30pm SESSION D
Le mercredi 27 mai 2015 – 15 h 15 – 16 h 30 SÉANCE D

D1 AGING / VIEILLISSEMENT — Fontaine C

D1.1 A population-based examination of interventions near the end-of-life and their effect on location of death

D1.2 Places of care: A Population-based examination of predictors to where people spend their last days of life

D1.3 Trends in staffing in Ontario's Long-Term Care Homes: Are there differences by profit status and chain ownership?

D1.4 Understanding the Characteristics and Resource Utilization Patterns of Long-Term Care Residents in Ontario

D2 ACCESS, EQUITY & YOUNG / ACCÈS, ÉQUITÉ ET JEUNESSE — Fontaine D

D2.1 Association of hyperbilirubinemia guidelines with socioeconomic disparities in newborn follow-up

D2.2 Impact of the Healthy Baby Prenatal Benefit on Perinatal Outcomes: A PATHS Equity for Children Project

D2.3 Determinants of pre-adolescent physical activity – a case for action on social determinants of health

D2.4 Inequalities in the Cancer Drugs Fund in England: access and survival by deprivation score

D3 PRIMARY HEALTHCARE (CANCER, MENTAL ILLNESS, ALCOHOL) / SOINS DE SANTÉ PRIMAIRES (CANCER, MALADIE MENTALE, ALCOOL) — Fontaine E

D3.1 Comprendre les déterminants du diagnostic précoce de cancer au Québec

D3.2 Primary care organizational characteristics supporting care for patients with mental-physical multimorbidity: a qualitative case study

D3.3 Effects of Family Medicine Groups on visits to the emergency department among diabetics in Quebec between 2000 and 2011: a population-based segmented regression analysis of an interrupted time series

D3.4 Utilization of Emergency Departments (ED) in Cancer Patients in Manitoba, Canada

D4 CHRONIC DISEASE MANAGEMENT / GESTION DES MALADIES CHRONIQUES — Fontaine F

D4.1 Health Services Utilization and Costs Associated with Co-Morbidity in Older Adults with Dementia

D4.2 Health Services Utilization and Costs Associated with Co-Morbidity in Older Adults with Stroke

D4.3 Diabetes risk reduction in primary care: evaluation of the Ontario Primary Care Diabetes Prevention Program

D4.4 Real-world effectiveness of stroke units in Ontario. A matched cohort analysis

D5 QUALITY, SAFETY & PERFORMANCE MEASUREMENT (PATIENT EXPERIENCE OR CARE) / QUALITÉ, SÉCURITÉ ET MESURE DU RENDEMENT (EXPÉRIENCE DE SOINS DU PATIENT) — Fontaine G

D5.1 Implementing Accountability in Health Care: A National and International Perspective

D5.2 Measuring Patient Experience with Cancer Symptom Management: A Collaborative Survey Design Process

D5.3 Electronic health records and effects on patient care: what their users say

D5.4 Measuring Inpatient Care Experiences

D6 PUBLIC HEALTH / SANTÉ PUBLIQUE — Fontaine H

D6.1 Managing Fearbola - A public relations approach to global health policy

D6.2 Factors Associated with Screening Mammography Participation among Canadian Women Aged 40 to 74 in 2012

D6.3 Reverse Gateways? The Impact of Medical Marijuana Legalization on Cigarette Smoking Among American Adults

D6.4 Quality of Life among individuals experience homelessness and mental illness: baseline measurements from the At Home/Chez Soi Project

D7 PANEL / PRÉSENTATION EN PANEL — Mont Royal

D7 Pan-Canadian Real-world Health Data Network

Réseau pancanadien de données réelles sur la santé

Thursday, May 28, 2015 – 11:00am - 12:15pm SESSION E

Le jeudi 28 mai 2015 – 11 h 00 - 12 h 15 SÉANCE E

E1 HEALTH REFORM II / RÉFORME DES SOINS DE SANTÉ II

Fontaine C

E1.1 Should we pay family physicians to register unattached patients? The unintended consequences of financial incentives in Quebec's access registries

E1.2 Predictors of Employment and Income Assistance Usage in Early Adulthood across Type and Income Quintile

E1.3 Partnering to Implement a New School Health Service Delivery Model for Children with Chronic Conditions: Reflections and Lessons Learned

E1.4 Addressing the population health effects of inequitable uptake in colorectal cancer screening in Newfoundland and Labrador

E2 ACCESS, EQUITY AND AGING / ACCÈS, ÉQUITÉ ET VIEILLISSEMENT

Fontaine D

E2.1 Canada and The Commonwealth Fund 2014 International Health Policy Survey of Older Adults

E2.2 The health and health services utilization of Canadian Veteran in Ontario: Development and early results of the first population-based resource using provincial and national administrative healthcare data

E2.3 Developing a Taxonomy of Health Care Aide Tasks in a Personal Care Home

E2.4 Changes in Potentially Inappropriate Drug Prescribing with Nursing Home Admission

E3 PRIMARY HEALTHCARE AND NURSING / SOINS DE SANTÉ PRIMAIRES ET SOINS INFIRMIERS

Fontaine E

E3.1 More nurses in primary care, yes! But what for?

E3.2 Cost-effectiveness of nurse-led collaborative care for patients with diabetes who screen positive for depression in primary care: results from a controlled implementation trial

E3.3 Expérience de soins des patients et pratique infirmière dans les soins de santé primaires

E3.4 La clarification des rôles professionnels dans les équipes de première ligne: une étude de cas multiples

E4 CHRONIC DISEASE MANAGEMENT / GESTION DES MALADIES CHRONIQUES

Fontaine F

E4.1 Improving access to minimally adequate counseling/psychotherapy through financial incentives: Did British Columbia get it right?

E4.2 Increasing medication adherence and income assistance access for first-episode psychosis patients through an early intervention service: A PATHS Equity for Children Project

E4.3 Effect of an early intervention for psychosis treatment program on suicidal behaviour and hospital service use: A PATHS Equity for Children Project

E4.4 Justice involvement of homeless men and women with mental illnesses: can self-report be regarded as reliable evidence?

E5 HEALTH ECONOMICS / ECONOMIE DE LA SANTÉ

Fontaine G

E5.1 Cancer Formulary Recommendations in Canada - A Revealed Preferences Analysis

E5.2 Impact des incitations financières sur l'accès aux services et la qualité des soins : cas du programme d'accès à la chirurgie au Québec

E5.3 Estimating Cost-Effectiveness of Cervical Cancer Control Policies Using a National-Level Microsimulation Model

E5.4 Using micro-simulation for projecting health care costs for neurological conditions in Canada

E6 HEALTH HUMAN RESOURCES / RESSOURCES HUMAINES EN SANTÉ

Fontaine H

E6.1 2014 work locations of Memorial University medical graduates

E6.2 Geriatric care planning in home care: time for change?

E6.3 Generalist, Specialist, Subspecialist: How is the physician workforce changing and what is driving the change?

E6.4 Trends among specialist physician unemployment in Canada: gaining understanding of this new phenomenon

E7 PANEL / PRÉSENTATION EN PANEL

Mont Royal

E7 Creating Capacity in Support of System Transformation in Ontario

Renforcement des capacités à l'appui de la transformation du système en Ontario

Thursday, May 28, 2015 – 1:30pm - 2:45pm SESSION F

Le jeudi 28 mai 2015 – 13 h 30 – 14 h 45 SÉANCE F

F1 MATERNAL CHILD HEALTH & MENTAL HEALTH / SANTÉ MATERNELLE ET INFANTILE ET SANTÉ MENTALE

Fontaine C

F1.1	Variability in postpartum mental health service use among immigrant women in Ontario
F1.2	Marginalization and access to community mental health services prior to psychiatric emergency visits in postpartum women in Ontario
F1.3	Family-Centered Services versus Family-Centered Systems: The Relationship Between Autism Services and Mothers' Wellbeing
F1.4	Labour and Delivery Outcomes Among Ontario Women with Intellectual and Developmental Disabilities

F2 KNOWLEDGE TRANSLATION AND EXCHANGE / TRADUCTION ET ÉCHANGE DE CONNAISSANCES

Fontaine D

F2.1	La participation de patients à des comités d'amélioration continue de la qualité: leur point de vue sur leurs apports et leurs défis
F2.2	Social Media's Impact on Getting Health Research into the Hands of Those Who Can Use It: The CADTH Health Technology Assessment (HTA) experience
F2.3	Applied Knowledge Mobilization to Improve Health and Healthcare – The CADTH Experience
F2.4	Using In-Person Modular Workshops to Build Capacity for Health System Improvement in Regions across Canada

F3 PRIMARY HEALTHCARE LINKED WITH SECONDARY CARE / SOINS DE SANTÉ PRIMAIRES CONJUGUÉS AUX SOINS DE SANTÉ SECONDAIRES

Fontaine E

F3.1	Impact of community-based outpatient care and medication reconciliation after discharge on reducing hospital readmissions in Ontario
F3.2	Exploring Palliative Care Services in Primary Care Practices; a Comparison of Ontario and Quebec
F3.3	From acute care to primary care: examining follow-up with physician after acute care hospital discharge in Alberta and Saskatchewan
F3.4	Keeping Family Physicians in the Loop: The receipt of discharge summaries after hospital admissions in Ontario

F4 HEALTH ECONOMICS (COSTS) / ÉCONOMIE DE LA SANTÉ (COÛTS)

Fontaine F

F4.1	Cost-Drivers of Private Drug Plans in Canada
F4.2	High-cost users of prescription drugs: a population-based analysis by age and sex from British Columbia, Canada
F4.3	Total and attributable healthcare costs of hypertension: historic and projected costs in Alberta, Canada
F4.4	Does Higher Spending Improve Survival Outcomes for Myocardial Infarction? Examining the Cost-Outcomes Relationship using Time-Varying Covariates

F5 QUALITY, SAFETY & PERFORMANCE MEASUREMENT AND CHRONIC DISEASE MANAGEMENT / QUALITÉ, SÉCURITÉ ET MESURE DU RENDEMENT ET GESTION DES MALADIES CHRONIQUES

Fontaine G

F5.1	Patterns and cost of health care during transitions to adult care among youth with chronic conditions in Ontario: A population-based cohort study
F5.2	Ontario's Health Links: Measuring Success
F5.3	Practicality of using the Patient Activation Measure to gauge program effectiveness
F5.4	A Mixed Methods Study: Examining the Relationship between Therapeutic Self-Care and Adverse Events for Home Care Clients in Ontario, Canada

F6 PHARMACEUTICAL POLICY II / POLITIQUE PHARMACEUTIQUE II

Fontaine H

F6.1	Reforming private drug coverage in Canada: Inefficient drug benefit design and the barriers to change in unionized settings
F6.2	Do Financial Conflicts of Interest Influence the Drug Recommendations in Canadian Clinical Practice Guidelines?
F6.3	Generic Drugs in Canada, 2013
F6.4	Trends in prescription opioid use in British Columbia

F7 PANEL / PRÉSENTATION EN PANEL

Mont Royal

F7	Long-Term Solutions: Fair and Sustainable Options for Financing Universal Long-Term Care in Canada Solutions à long terme : options équitables et pérennes pour le financement universel des soins de longue durée au Canada

F8 PANEL / PRÉSENTATION EN PANEL

Montreal Ballroom

F8	Models and Innovations of Primary Health Care: What works? In what ways? For whom? and What's next? Modèles et innovations en soins de santé primaires : qu'est-ce qui fonctionne, de quelle manière, pour qui et que nous réserve l'avenir ?

Poster Presentations At-a-Glance

Présentations d'affiches en un coup d'œil

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

FONTAINE AB

BOARD #	PRESENTATION
8	**A comparison between initial and well established implementation periods of the Ontario MedsCheck Annual pharmacy medication review service** **LISA DOLOVICH** OPEN co-lead, Research Director, Associate Professor, OPEN (Ontario Pharmacy Research Collaboration), McMaster University
20	**A How-To Guide for Planning Hospital-to-Home Care Transition Interventions in Older Adults: Findings and Implications of a Realist Synthesis** **ANUM KHAN** PhD student, University of Toronto
16	**A New Service Delivery Model to Improve Access to Orthopedic Surveillance for Children with Cerebral Palsy (CP)** **KAREN HURTUBISE** PhD student, Université de Sherbrooke
34	**A Resilient Nursing Workforce: The Impact of Policy Over Time** **MARY CREA** Statistician, McMaster University
40	**A Study of Low Acuity Emergency Department Use in Regina, Saskatchewan: Incidence, Implications and Intervention** **TARA TODD** Student (MPP), Johnson-Shoyama Graduate School of Public Policy
30	**A survey tool to assess long term care resident experience** **SHAILESH NADKARNI** Vice President, Service and Operations, National Research Corporation Canada
2	**A systematic review of primary care interventions to improve transition of youth with chronic conditions from paediatric to adult healthcare** **JASMIN BHAWRA** Clinical Research Project Coordinator, The Hospital for Sick Children
1	**Assessing Health System Value in Upstream Health Interventions: A Case Study of Cardiac Rehabilitation and Prevention** **CAROLINE BECK** Student, Johnson-Shoyama Graduate School of Public Policy, University of Regina
15	**Changing the Service Delivery Model to Meet Rehabilitation Needs of Young Children (0-3 years): Impact on Service Wait-times and Staff Perceived Performance** **KAREN HURTUBISE** PhD student, Université de Sherbrooke
36	**Comprehensive Primary Care Physicians: Who are they and whom do they serve?** **RICK GLAZIER** Senior Epidemiologist, ICES
27	**Cost-effectiveness analysis of a two-dose HPV vaccine using the CRMM-HPVMM microsimulation model** **SAIMA MEMON** Analyst, Canadian Partnership Against Cancer
33	**Cost-Utility Analysis of Therapeutic Drug Monitoring for Asparaginase in Pediatric Leukemia** **MEERA RAYAR** Resident, Hospital for Sick Children
24	**Creating Partnerships for Change: A Proposal to Study Multi-stakeholder Collaboration Towards Organizational Innovations to Promote Access to Primary Health Care for Vulnerable Populations** **EKATERINA (KATYA) LOBAN** PhD student, McGill University
32	**Drug Use Among Seniors on Public Drug Programs in Canada, 2012** **JEFF PROULX** Program Lead, CIHI
22	**Engaging patients on social media platforms: exploring health and information exchange processes** **CLAUDIA LAI** Doctoral Candidate, Institute of Health Policy Management and Evaluation, University of Toronto
9	**Examining interventions to address the transition gap: A systematic review of youth to adult mental health services** **MARK EMBRETT** Doctoral Candidate, McMaster University
7	**Geriatric Syndromes Predict Postdischarge Outcomes Among Older Emergency Department Patients: Findings from a Multinational Cohort Study** **ANDREW COSTA** Assistant Professor | Schlegel Chair in Clinical Epidemiology & Aging, McMaster University
18	**Human development focusing on access to health care of South Asian immigrants living in the Greater Toronto Area (GTA)** **S. M. TARIQUL ISLAM** Sessional Instructor, Laurentian University
3	**Implementing a new school-based occupational therapy service delivery model: What do stakeholders say about access, service quality, and sustainability?** **CHANTAL CAMDEN** professeure adjointe, Université de Sherbrooke
42	**Inequality by Race/Ethnicity in Survival Improvement of Children with Acute Lymphoblastic Leukemia in the United States and Canada** **LINWEI WANG** Master Student, School of Public Health, University of Alberta
38	**Integrating Health Technology Reassessment into a Complex Healthcare System: Diverse Perspectives from Stakeholders in Alberta Health Services** **LESLEY SORIL** PhD Student, University of Calgary
4	**Le raisonnement clinique des ergothérapeutes en Soutien à domicile : importance des aspects administratifs et organisationnels dans le choix des interventions offertes aux clients** **ANNIE CARRIER** Ergothérapeute, Université de Sherbrooke

25	**Learning from each other to promote the health of older stroke survivors through an integrated community-based stroke rehabilitation team supported by a mobile health solution** **NANCY MATTHEW-MAICH** Professor, Mohawk College
41	**Mapping TB treatment availability for refugees and migrants in Tak province, Thailand** **NAOMI TSCHIRHART** PhD candidate, University of Ottawa
29	**Measuring Triple Aim Results for a Suburban-rural Population by an Alberta Primary Care Network** **GRACE MOE** Executive Director - Strategic Planning & Special Projects, Westview Primary Care Network/Westview Physician Collaborative
10	**Meeting the Health Service Needs of Urban Aboriginal Women for Co-occurring Diabetes, Mental Health and Addiction Issues** **HASU GHOSH** Post-Doctoral Fellow/ Part-time Faculty, Carleton Universtiy, University of Ottawa
31	**Methods to define hypertension in electronic medical record-validation against national survey data** **MINGKAI PENG** Statistical associate, University of Calgary
43	**Monitoring Drug developments: A Multifaceted Approach** **GREG MCCOMB** Senior Economic Analyst, Patented Medicine Prices Review Board
37	**Mortality Belief, Individual Health Shocks and the Decision to Smoke** **YAN SONG** Doctoral Candidate, McGill
5	**Optimiser la performance des ergothérapeutes dans les programmes de soutien à domicile québécois : impacts sur le raisonnement clinique et les interventions offertes** **ANNIE CARRIER** Ergothérapeute, Université de Sherbrooke
21	**Patterns of care: identifying and describing pathways during episodes of care for chronic obstructive pulmonary disease exacerbations** **JOHN PAUL KUWORNU** PhD Candidate, University of Manitoba
17	**Perceived need, service use and unmet need for health services amongst a sample of socially marginalized people who use drugs** **ELAINE HYSHKA** PhD Canadidate, School of Public Health, University of Alberta
11	**Perspectives en matière de soins de santé selon le public et les fournisseurs et gestionnaires des soins de santé : résultats du sondage sur les soins de santé au Canada 2014** **AMÉDÉ GOGOVOR** Étudiant-chercheur au doctorat, Université McGill
35	**Physicians Reaching Out: Supporting Youth Mental Health in British Columbia** **HELEN THI** Policy Analyst, Doctors of BC
39	**Predictors of hospital discharge to continuing care: exploring the role of kidney function** **HELEN TAM-THAM** PhD Candidate, University of Calgary
28	**Primary care provider perceptions of the challenges of managing patients with mental-physical multimorbidity: a qualitative study** **MATTHEW MENEAR** Post-Doctoral Fellow, Laval University
6	**The Effects Of A Preoperative Educational Dvd On Parental Participation In Recovery Room: A Randomized Controlled Trial** **JULIE CHARTRAND** Assistant Professor, University of Ottawa
14	**The Patient Medical Home: how do Canadian primary care practices measure up to its ten goals?** **NICOLE HERPAI** Student, University of Manitoba
19	**The Role of Education in Colorectal Cancer Screening Participation: Evidence from Canadian Community Health Survey (2011-2012)** **SHAN JIANG** PhD candidate, University of British Columbia
13	**Trends in Income-Related Health inequalities In Canada: Alcohol-attributable hospitalizations** **CHRISTINE BOYES** A/Program Consultant, CIHI
26	**Understanding the Health Service Use of Colorectal Cancer Screening among First Nations: Describing the Unfolding of a Project** **BONNIE MCINTOSH** PhD Student, University of Ottawa
12	**Understanding Variations in Health System Efficiency in Canada: A Descriptive Multiple Case Study** **SARA GUILCHER** Senior Researcher, Canadian Institute for Health Information
23	**Where's the 911 for First Nation peoples mental health services in Manitoba?** **JOSÉE G LAVOIE** Associate Professor, University of Manitoba

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

FONTAINE AB

BOARD #	PRESENTATION
44	**A Collaborative Approach to Designing Better Care** **SERENA KURKJIAN** Project Coordinator, Cancer Care Ontario
54	**A comparison of regulatory policies governing the promotion of prescription medicines by pharmaceutical sales representatives in Canada, France and the United States** **LINE GUÉNETTE** Graduate Student/Research Assistant, McMaster University
47	**A Rapid Scoping Review Update For Non-Clinical Interventions For Reducing Unnecessary Caesarean Section** **INNIE CHEN** Physician, The Ottawa Hospital
63	**Abuse in childhood substantially increases the risk of later depression and anxiety: a systematic review of cohort studies** **MUZI LI** Student, University of Saskatchewan
82	**Administrative data and Life Course Epidemiology** **ELIZABETH WALL-WIELER** Student, University of Manitoba
52	**Bonus Payments for Avoiding Outside Use in Ontario's Leading Primary Care Capitation Model** **RICK GLAZIER** Senior Scientist, Institute for Clinical Evaluative Sciences
68	**Caring is sharing: Provider perceptions of secondary use of anonymized health information** **ESTER MOHER** Post-Doctoral Fellow, University of Ottawa
64	**Change in Quality of Care Associated with Centralization of Elective Orthopedic Surgery Procedures: A scoping review** **ELENA LOPATINA** Research assistant, University of Calgary
71	**Community general paediatricians' barriers to providing ASD diagnoses: a qualitative study** **MELANIE PENNER** Clinician Investigator, Holland Bloorview Kids Rehabilitation Hospital
70	**Cost-effectiveness analysis comparing pre-diagnosis autism spectrum disorder (ASD)-targeted intervention with Ontario's Autism Intervention Program** **MELANIE PENNER** Clinician Investigator, Holland Bloorview Kids Rehabilitation Hospital
85	**Cost-Effectiveness Analysis of Preimplantation Genetic Screening in In Vitro Fertilization** **DANIEL WAGNER** Graduate Student, University of Toronto
62	**Costs of Health Care across Primary Care Models in Ontario** **MAUDE LABERGE** PhD Candidate, University of Toronto
61	**Costs of Mental Health Care Services among High Cost Users in Ontario** **PAUL KURDYAK** Director, Health Outcomes and Performance Evaluation Research Unit, CAMH
77	**Design, Implementation and Evaluation of Complex Health Care Interventions in the Community** **VALERIA RAC** Associate Program Director, Director Clinical Research Division, THETA Collaborative
50	**Development and Validation of a Decision Aid for Choosing Among Anticoagulants for Atrial Fibrillation** **SAFOORA FATIMA** Department of Clinical Epidemiology and Biostatistics, McMaster University
45	**Different Patterns of Advanced Access Implemented in Primary Healthcare Practice** **MYLAINE BRETON** professor, Université de Sherbrooke
76	**Do British Columbians with major depression receive minimally adequate care?** **JOSEPH PUYAT** PhD candidate, UBC School of Population and Public Health
67	**Do economic fluctuations affect the health behaviours of Canadians?** **SANDRA MILICIC** PhD Candidate, Health Policy, McMaster University
46	**Effects of Family Medicine Groups on visits to the emergency department among diabetics in Quebec between 2000 and 2011: a population-based segmented regression analysis of an interrupted time series** **RENEE CARTER** Student, McGill University
74	**Effects of Housing First on employment and income of homeless individuals: results of a randomized trial** **ERIC LATIMER** Post-Doctoral Fellow, St Michael's Hospital

66	**Engaging older adults in healthcare research and planning: Guidelines from the CHOICE project** **HEATHER MCNEIL** Student, University of Waterloo
83	**Episodic Caregiving - The Caregiving Sister That Policy Forgot** **WENDY PORCH** Manager, Programs and Communications, Canadian Working Group in HIV and Rehabilitation
84	**Examining the influence of organisational and institutional arrangements on priority-setting for health technology assessment (HTA): A mixed methods study** **JULIANA YI** PhD Student, University of Toronto
79	**Family physicians' interactions with sales representatives: a focus group study in three countries** **LINE GUÉNETTE** Research coordinator, University of British Columbia
55	**Gender differences in primary care clinical activity and uptake of incentive payments in British Columbia: A preliminary analysis** **LINDSAY HEDDEN** PhD Candidate, School of Population and Public Health, UBC
69	**Healthcare Associated Infections, Infection Prevention & Control: Patient Safety Survey** **EMILY NADOLNY** Epidemiology & Policy Analyst, Public Health Agency of Canada/ The University of Toronto
65	**"How appropriate is all this data sharing anyway?": Building consensus on electronic health information exchange in extended circles of care** **JOSEPHINE MCMURRAY** Assistant Professor, Wilfrid Laurier University
72	**Impact of dementia on diabetes care quality in Ontario** **YELENA PETROSYAN** MD, MPH, PhD(C), University of Toronto
80	**Knowledge and effects of the WHO Global Code of Practice on the International Recruitment of Health Personnel on health worker migration** **IVY LYNN BOURGEAULT** Researcher, University of Ottawa
59	**Laying the foundations for multi-jurisdictional research: Structural and population features of Western Canada's urban health regions and zones** **SARA KREINDLER** Manitoba Research Chair in Health System Innovation, University of Manitoba
56	**Obesity Predicts Differential Rates of Coronary Revascularization Following Cardiac Catheterization** **JEFFREY JOHNSON** Professor, University of Alberta
53	**Planning for Change In Health Care Reform: The Case of Alberta** **HOWARD GREENWALD** Professor, University of Southern California
78	**Potentially Avoidable Emergency Department Visits Made by Nursing Home Residents: Refining Current Definitions** **NADIA REIDER** PhD Student, University of Manitoba
51	**Provider perspectives on facilitators and barriers to accessible service provision for immigrant women with postpartum depression (PPD)** **REBECCA GANANN** PhD Student, Assistant Clinical Professor, McMaster University
58	**Scaling up iKT? Adapting integrated KT strategies to a large multi-jurisdictional network** **SARA KREINDLER** Manitoba Research Chair in Health System Innovation, University of Manitoba
49	**Structure and Function of Stroke Units in Ontario in 2013-2014** **VALERIA RAC** Research Coordinator, THETA Collaborative
48	**The CHOICE Project: Engaging Older Adults in Healthcare Decision-Making** **JACOBI ELLIOTT** PhD Candidate, University of Waterloo
73	**The impact of Quebec primary healthcare (PHC) reform on patients' experience of care, unmet needs and use of services** **RAYNALD PINEAULT** médecin-conseil, Direction de santé publique de montréal
75	**The intersection of gambling and substance use among men facing homelessness** **ERIC LATIMER** Post-Doctoral Fellow, St Michael's Hospital
81	**The Many Meanings of Patient Engagement: A Unified Framework** **VIDHI THAKKAR** Doctoral Student, University of Toronto
57	**Understanding the Multiple Vulnerabilities of Homeless Youth: Findings from At Home/Chez Soi** **NICOLE KOZLOFF** Resident, University of Toronto
60	**What happens when young and mid-life adults leave complex continuing care? Patterns of subsequent health system use and survival** **KERRY KULUSKI** Scientist and Assistant Professor, Bridgepoint Active Healthcare and University of Toronto

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FONTAINE AB

BOARD #	PRESENTATION
110	**A Cross-Provincial Comparison of the Policy Context of Community-based Primary Healthcare Innovations Intended to Influence Performance: Preliminary Results of a Document Review** **RUTH MARTIN-MISENER** Associate Professor, Dalhousie University
97	**A novel method for systematic evaluation of health indicators: Perspectives from a measures producer** **ZEERAK CHAUDHARY** Senior Analyst, Canadian Institute for Health Information
103	**Adoption of evidence-based practices by health care organizations: a scoping literature review** **JENNIFER INNIS** PhD Student, University of Toronto
122	**Aider les patients à retourner au travail après une dépression lorsqu'on est médecin de famille : une pratique sous influence?** **CHANTAL SYLVAIN** professeure, Université de Sherbrooke
102	**An examination of perceived healthcare accessibility and unmet healthcare need among the City of Toronto** **JONGNAM HWANG** Post-Doctoral Fellow, Centre for Research on Inner City Health, St. Michael's Hospital
107	**Analyse comparative de caractéristiques de la pratique des médecins de famille dans les cliniques médicales, en fonction du type de région de pratique** **MARC LEMIRE** Chercheur, Institut national de santé publique du Québec et Université de Montréal
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95	**Capturing activities performed by pharmacists in primary care interprofessional teams in Ontario (FHTs)** **SIMONE DAHROUGE** Director, Scientist, CT Lamont Primary Health Care Centre
109	**Clinical preventive services in primary care settings: a substudy using data from the Quality and Cost of Primary Care (QUALICOPC) cross-sectional study** **GREGORY LEON** Planning, Programming, and Research Officer (analyst), Institut national de sante publique du Quebec (INSPQ)
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126	**Generic atorvastatin: The impact of physician detailing and sampling in Manitoba** **HEATHER WORTHINGTON** Research Coordinator, UBC Centre for Health Services and Policy Research
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98	**Health Services Utilization and Costs Associated with Co-Morbidity in Older Adults with Diabetes** **KATHRYN FISHER** Statistician/Research Analyst, McMaster University
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123	**Hospitalizations and mortality in publicly funded for-profit and not-for-profit long-term care facilities: A population-based retrospective cohort study** **PETER TANUSEPUTRO** Research Fellow, The Bruyère Research Institute (BRI)
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120	**L'évolution des urgences au cours des dix dernières années au Québec** **OLIVIER SOSSA** Agent de recherche, Commissaire à la santé et au bien-être
101	**Laying the foundation for primary care performance measurement: Lessons from Ontario** **WISSAM HAJ-ALI** Project Lead, Health Quality Ontario
127	**Le 'benchmarking' au sein des organisations de réadaptation: l'utilisation d'indicateurs de performance et les facteurs d'influence** **DIANA ZIDAROV** physiothérapeute, étudiante au doctorat, Université de Montréal
128	**Les médecins de famille peuvent-ils réellement contribuer à prévenir l'incapacité prolongée de travail secondaire à un trouble dépressif?** **CHANTAL SYLVAIN** professeure, Universite de Sherbrooke
113	**Les patients ressources, acteurs incontournables dans l'amélioration des soins aux patients ayant vécu une amputation traumatique du membre supérieur** **JOSÉE ARSENAULT** assistant professor, University of Montréal
121	**Managing Complexity in Primary Health Care: Developing and piloting a person-centred mobile application for patients with complex chronic disease and disability** **CAROLYN STEELE GRAY** Post-Doctoral Fellow, Bridgepoint Active Healthcare
96	**New developments in the policy context of migration of health professionals from Kenya** **BRENDA DOGBEY** PhD Candidate, University of Ottawa
105	**Participatory health councils and good governance: healthy democracy in Brazil?** **UTTAM BAJWA** Associate Professor, University of Toronto
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86	**Quality Indicators for End-of-Life Care in Ontario** **SYMRON BANSAL** Research Analyst, Health Quality Ontario
112	**Real-world cost effectiveness of stroke units in Ontario. A matched cohort analysis** **PETROS PECHLIVANOGLOU** Health Economist/ Post-Doctoral Fellow, THETA Collaborative, Univesity of Toronto
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119	**The Effect of Electronic Medical Record (EMR) Implementation on Communication Between Pharmacists and Clinicians** **ALEXANDER SINGER** Assistant Professor, Department of Family Medicine, University of Manitoba
118	**The process of communicating policymaking and research-based evidence for children with disabilities** **KEIKO SHIKAKO-THOMAS** Post-Doctoral Fellow, University of Montreal
114	**Typologie de l'affiliation à un médecin de famille, une mesure construite à partir des banques de données administratives** **SYLVIE PROVOST** Médecin-conseil, Direction de santé publique de Montréal
117	**Using natural language processing for detecting adverse events from electronic health record data: A validation study** **CHRISTIAN ROCHEFORT** Assistant professor, McGill University
116	**Vulnérabilité périnatale et retombées d'un programme de soutien à domicile : regard sur les relevailles (1/2)** **GENEVIEVE ROCH** Professeure agrégée, Université Laval / Centre de recherche du CHU de Québec

Concurrent Sessions Guide

Guide des séances simultanées

Tuesday, May 26, 2015 – 1:30pm - 2:45pm SESSION A

Le mardi 26 mai 2015 – 13 h 30 - 14 h 45 SÉANCE A

A1 HEALTH HUMAN RESOURCES / RESSOURCES HUMAINES EN SANTÉ Fontaine C

A1.1 Conceptualizing regulated health professionals' competence in the workplace

Presented by **LEIGH CHAPMAN** Doctoral Student, University of Toronto, Lawrence S. Bloomberg Faculty of Nursing

This presentation will offer the Boyatzis (1986) model of effective performance as an alternative to the prevailing individualized view of competence in a contemporary healthcare context. Boyatzis's (1982) model of effective performance positions competence as one component influencing effective behaviour, along with job demands and organizational context. Boyatzis, an organizational theorist and management expert, conceptualizes competence as contextually-based and shaped by other organizational factors in effecting an individuals' behaviour. Boyatzis initially tested his model empirically and theoretically to support the role of competencies in influencing managers' behaviour in a variety of workplace settings. In theory, the Boyatzis model provides a framework of the behavioural manifestations that result from the relationship between an individual's competencies, job demands and organizational environment. Application of this model in a healthcare environment with regulated health professionals offers a more contextual conceptualization of competence in the workplace. This presentation will describe a doctoral research study which will explore how a Canadian academic health sciences centre operationalizes regulatory competency assessment in human resource management processes. This thesis research will use the Boyatzis model to elucidate constructs which impact behavior in the workplace at the level of the individual and organization. By advancing a theoretical model from organizational science in a healthcare context, it is anticipated that this study will offer an alternative perspective to prevailing conceptualizations of competence. Specifically, the Boyatzis (1986) model of effective performance offers a theory of the way in which competencies can be operationalized in a workplace context. Theoretical and conceptual support for Boyatzis' model may provide an alternative, more contextually-based view of competencies through a confirmatory theoretical analysis. It is anticipated that the study findings will challenge current conceptualizations of competence that are assessment-based, individualistic, and acontextual and provide an alternative understanding of competence. This work will elaborate emergent alternative conceptualizations of competence and elucidate organizational practices and human resource management processes impacting regulated health professional employees.

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A1.2 British Columbia's Health Care Worker Influenza Control Policy: A collaborative human resources/labour relations solution to a health care challenge

Presented by **MATT PRESCOTT** Executive Director, Communications, Health Employers Association of BC (HEABC)

Vaccinating healthcare workers against the flu reduces transmission to patients; however, healthcare workers have had relatively low vaccination rates. To protect patients, BC health employers introduced a policy in 2012/13 requiring health care workers to get a flu shot or wear a mask while in patient care areas. The policy working group followed a collaborative and phased approach to policy development and implementation. Employers were involved in policy development and early feedback from workers and unions resulted in a phased approach with the first year focusing on education and voluntary compliance rather than enforcement. Further union consultation after the first year resulted in additional adjustments related to reporting and identification requirements, and expansion to include visitors. The goal was to develop a policy that protects patients and is supported by employers and healthcare workers. Consistent implementation of the policy province wide was also a key factor to success. In the first year of mandatory compliance, 73 – 82 per cent of BC healthcare workers got the flu shot – a 25-40 per cent increase from historical rates, depending on health sector and setting. Incidents of non-compliance have been low due to the achievement of relatively high immunization rates; effective communication and education; public awareness and support; and, coordinated and consistent policy implementation. The policy was grieved by one union; however, careful and thorough policy development resulted in the arbitrator affirming that the policy is a lawful exercise of employers' management rights, allowing employers to fully implement the policy, including disciplinary action for non-compliance. BC's mandatory healthcare worker influenza vaccination program – the first in Canada – is now being adopted in other jurisdictions across Canada. After many years of relatively low healthcare worker influenza vaccination rates, BC implemented a mandatory vaccination/masking policy, resulting in a significant increase in vaccination rates. A collaborative and consistent approach to policy development and implementation has helped employers and healthcare workers to protect our most vulnerable residents from influenza.

A1.3 An interactive learning experience for learners and practitioners to enhance collaborative practice across disciplines and jurisdictions

Presented by **BRENDA GAMBLE** Associate Professor, U of Ontario Institute of Technology

Develop, produce and evaluate simulated learning models (SLM[s]) for educational instruction in the classroom, clinical setting and/or continuing education (CE) to support the acquisition and development of interprofessional (IP) competencies (role clarification, team functioning, collaborative leadership, interprofessional communication, interprofessional conflict resolution and patient/client/family/community-centred care) to enhance collaborative practice. We have conceptualized IP learning as an interactive activity involving; exposure didactically to IP competencies, immersion in the classroom (using SLMs) and the clinical setting, and mastery of IP competencies into professional practice. The Points for Interprofessional Education System framework is used to measure the quality of the learning activity (SMLs). We will conduct a pre/post-test using a self-administered electronic validated questionnaire to determine learners' attitudes toward IP learning prior and after the application of the SMLs. Data analysis will include non-parametric analysis. Focus groups (instructors/learners) will be used to determine the appeal of the SMLs as a learning activity. In consultation with educators and practitioners, informed by the literature and real life experiences we have produced and beta tested video 4 video-tape SLMs. Working collaboratively with university and college based Nursing, Medical Laboratory Sciences, and Allied Health (Kinesiology and Public Health) programs, we are currently implementing the SLMs as an IP learning tool in the classroom during the Winter 2015 term. The sample includes 4 classrooms with approximately 250 learners overall enrolled in either year 2 or 3 of their programs. Data collection and analysis will be completed by March 2015. We will report on the development and the impact of the SMLs as an educational tool for the acquisition and development of IP competencies. IP learning is iterative and requires life long learning. It is anticipated that the successful application of SMLs will enhance the educational experience for learners and better prepare them for their clinical practicums and professional practice. SMLs can be used for CE to update and refresh practitioner skills.

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A1.4 Nurse-Led Care Transitions Interventions: A Strategy to Improve Health System Integration and Performance

Presented by **MADELYN LAW** St. Michael's Hospital Volunteer Association Chair in Nursing Research, St. Michael's Hospital

To better understand under what circumstances nurse-led care transition strategies enhance health system integration and performance, including outcomes and experiences of complex elder patients. Component 1: An extensive and structured literature search is completed and evidence synthesis is currently in progress to identify in what circumstances specific nurse led care transition interventions with the complex elder patient population are effective. Component 2: To determine the feasibility of implementing nurse led care transition interventions with complex elder patients a modified Delphi consensus technique will be used with a panel of experts. Component 3: we will explore how best to enhance care transitions of the elderly patient population and their caregivers by identifying the current state, organizational readiness, barriers and facilitators, components of the interventions and associated measures and outcomes of participating sites. Results from Component 1 and Component 2 will be reported. An integrated knowledge translation approach will ensure the successful uptake of our results improving the health of elder Ontarians as they transition within and across health care settings and home, in addition to improving the well-being of their families and caregivers.

A2.1 Procurement as an instrument of health policy: What are we asking, what can it do?

Presented by **FIONA MILLER** Associate Professor; Director, Institute of Health Policy, Management and Evaluation, University of Toronto; Division of Health Policy and Ethics, Toronto Health Economics and Technology Assessment (THETA) Collaborative

The once obscure practice of health sector procurement is attracting greater policy attention. Traditionally tasked to ensure accountability and save money, procurement agencies internationally are increasingly charged with supporting broader missions: addressing health priorities, supporting industry and technological innovation, reducing health care's carbon footprint, or demanding ethical labour practices. To understand what policy goals motivate health sector procurement in Canada, and how procurement agencies are equipped to address these goals, we conducted a comparative case study of the evolution of health technology procurement arrangements in 4 provinces (Alberta, British Columbia, Ontario, Quebec) in Canada, using document review, key informant interviews and non-participant observation. As well, we reviewed a sample of "Requests for Proposals" (RFPs) from procurement agencies across Canada, to explore the processes and criteria used to adjudicate the value of healthcare goods and services by public provider organizations and their agents (expected n=100). Procurement has been a focus of government efforts at reform in recent years. Different arrangements exist across provinces, but all have been influenced by demands for transparency and accountability in use of public funds, as well as reduced costs to health systems through process efficiencies and volume-based discounts. In addition to these traditional goals, procurement agencies are facing new policy demands. In some jurisdictions, links to Health Technology Assessment processes have been emphasized, to support evidence-informed technology adoption. As well, there is growing emphasis on 'strategic procurement' to support industry and economic development. Our preliminary review of RFPs suggests, however, that the traditional policy emphasis on cost reduction and administrative accountability remains, with limited attention to evidence, technological innovation, environmental sustainability or fair labour practices. As governments seek to enhance their use of health sector procurement as an instrument of public policy, it is important to consider the range of missions that might be addressed. As well, there is a clear need to design procurement systems that can achieve the full set of appropriate goals.

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A2.2 Policy Options for Moving Team Based Primary Health Care Forward: Lessons from a Comparative Policy Analysis of Three Provinces

Presented by **SABRINA WONG** Professor, UBC

The Canadian First Ministers agreed >10 years ago that team-based care is central to primary health care (PHC) reform; Substantial funds were committed. We examined: 1) how different policies across British Columbia, Alberta and Saskatchewan conceptualize team-based care; and 2) how policies guide the implementation of team-based PHC service delivery. We a conducted a comparative policy analysis across these three provinces to examine the relationships and processes involved in implementation of team-based PHC care. Coding of the publicly available provincial, regional, and primary care organization policies was completed using Nvivo. Three provincial policy syntheses consisting of themes were created from our analyses. The syntheses were validated and policy options for implementing team-based care were provided by key informants (n=29) across the provinces. A roundtable of representatives (n=15) from provincial health ministries, health regions, professional associations and service providers identified the top priority policy options. Six themes formed the policy syntheses: variation in conceptualization and composition of team-based care; engaging the PHC community in how team-based care is implemented; payment, billing and funding of team-based care; lack of system alignment to support team-based care; scope of practice, regulation and liability; and the need for a consistent approach to measuring the performance and outcomes of team-based care. There is a lack of clarity on defining team composition and roles of members. Guidance on several aspects of team care is missing. Four policy options were prioritized through the roundtable forum: align health system goals, policies, workforce and structures; develop appropriate and sustainable compensation models; invest adequate resources to support system change; and integrated collaborative practice metrics in PHC performance monitoring and evaluation. The lack of clarity and guidance likely contributes to inconsistencies across the system when implementing team-based care. The policy options contained inherent conflicts and trade-offs and critical factors for implementation. Our results suggest a strong recommendation to present the four options as a package to prevent policy-makers from "cherry picking".

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A2.3 Measuring Health Research Funding Impact in Ontario: The Health System Research Fund (HSRF) Impact Assessment Framework

Presented by **MICHAEL HILLMER** Senior Research/Planning Advisor, Ontario Ministry of Health and Long-Term Care

(1) To demonstrate the impact of research projects funded by the Ontario Ministry of Health and Long-Term Care's (MOHLTC) Health System Research Fund (HSRF) on health policy and practice and (2) To document the practical application of a conceptual framework in measuring different domains of research impact. The Canadian Academy of Health Sciences' (CAHS) health research impact framework (2009) was used to quantify the longitudinal effect of HSRF-funded projects on Ontarians' health outcomes and health system transformation. Two performance measurement tools were developed to capture these outcomes from the funded recipient and knowledge user perspective. Both tools are survey questionnaires administered annually. A mixed methods design was used to evaluate the impact of HSRF investments through the 5 CAHS domains (advancing knowledge, informed decision-making, capacity building, health impacts, and broad socio-economic impacts). Two reviewers independently coded qualitative data using Nvivo. Quantitative data were analyzed using descriptive statistics. A combination of quantitative and qualitative performance indicators were selected from the CAHS framework and implementation science literature and included in the Productivity/Impact Report (n=22) and the Knowledge User Survey (n=21). The majority of reported impacts were observed across 3 CAHS domains - advancing knowledge, informed decision-making and capacity building – with 52% of outputs actively used in policy/practice. Results indicate that 85.7% of HSRF recipients leveraged external funding in 2013/14, totalling $CAD 36,946,564. Recipients produced a total of 1,486 publications (non- and peer-reviewed) and reported a total of 5,257 citations. Recipients participated in 370 collaborations and supported 160 Knowledge Translation and Exchange (KTE) activities. HSRF projects positively impacted knowledge users' work, with 77% indicating improvements in effectiveness, relevance, efficiency and/or customer service. The MOHLTC Impact Assessment Framework provides a systematic means of capturing how research/KTE outputs are used to inform healthcare policy and practice. Evaluating research/KTE impacts from both funded recipients' and knowledge users' perspectives contribute to understanding the HSRF's emerging impact on the health of Ontarians and healthcare system improvements.

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A2.4 Are There Long-term Academic Benefits of Full-Day Kindergarten? A PATHS Equity for Children Project

Presented by **DAN CHATEAU** Associate Professor, Senior Research Scientist, University of Manitoba, Manitoba Centre for Health Policy

Despite the implementation of full-day kindergarten (FDK) in several Canadian provinces, there is little evidence on the long-term outcomes associated with this program. Our objective was to use population-level data from Manitoba to determine whether FDK results in better long-term academic outcomes. We examined provincial reading and numeracy assessments in grades 3, 7, and 8 and a performance index in grade 9 for students in two Manitoba school divisions between 1999-2012. In School Division A (SDA), FDK is targeted in the lowest SES schools; in School Division B (SDB) FDK was gradually introduced universally. SDA FDK students were matched using propensity scores to students in an adjacent school division with similar SES but no FDK; in SDB a stepped-wedge design was used. Logistic regressions accounted for confounders including classroom effects and sex. The Kakwani Progressivity Index (KPI) determined how FDK affected equity. There were 224-544 children in FDK and 869-1923 non-FDK matches in SDA, depending on the outcome examined; numbers in SDB ranged from 335-707 (FDK) and 222-475 (non-FDK). Including interactions, 35 comparisons were examined in SDA and 24 in SDB. None of the outcomes examined in SDB showed statistically significant effects of FDK that were robust to unmeasured confounding. In SDA there were only 3 statistically significant and robust findings of benefits of FDK, all related to math. Comparisons of KPIs for FDK and non-FDK children in both school divisions demonstrated inequities in outcomes associated with SES, however there were no significant differences in equity between the FDK and non-FDK children for any of the outcomes. Our findings indicate no apparent benefits of universal FDK, and limited benefits from targeted FDK, specifically long-term improvements in numeracy for low-income girls. No reductions in inequity were found. Decisions regarding FDK implementation should weight the costs of this program against the limited long-term academic benefits.

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A3 PRIMARY HEALTHCARE: REFORM AND PERFORMANCE / SOINS DE SANTÉ PRIMAIRES : RÉFORME ET RENDEMENT

Fontaine E

A3.1 Does Having A Usual Family Medicine Physician Influence Hospitalization And Emergency Department Visit Rates?

Presented by **YVONNE ROSEHART** Program Lead, Canadian Institute for Health Information

To evaluate the impact of continuity of care with family physicians on hospitalization rates for Ambulatory Care Sensitive Conditions and emergency department visit rates for Family Practice Sensitive Conditions. To illustrate how patient level physician billing data can be linked with hospital data to follow patients through the health system. Using 2007-20012 patient-level physician billing (PLPB) data from Alberta and Saskatchewan, a patient-provider usual provider continuity (UPC) index was calculated. The PLPB data was then linked with the Discharge Abstract Database (DAD) and The National Ambulatory Care Reporting System (NACRS) to identify hospitalizations for Ambulatory Care Sensitive Conditions and ED visits for Family Practice Sensitive Conditions. Cost estimates for ACSCs and FPSCs were calculated from the Canadian MIS Database. Regression analyses were conducted to identify any association between continuity of care and ACSC and FPSC related-visits. Patients and provider characteristics were examined for possible associations with continuity. 14,767 and 6,389 patients were hospitalized for an ACSC in Alberta and Saskatchewan respectively. Those hospitalized for an ACSC tended to be older (ages 65+) and living in rural areas. 289,278 and 13,758 patients visited an ED for a FPSC in Alberta and in Saskatoon and Regina respectively. These patients were more likely to be younger and living in rural areas. One of the key predictors of hospital use for ACSCs and FPSCS is continuity of care with a family physician. As continuity of care increases, the odds of being hospitalized for an ACSC or visiting an ED for a FPSC decreases. Other factors associated with ACSC hospitalizations and FPSC visits include age and rurality. Additionally, health status is associated with hospitalization for ACSCs. High continuity of care positively affects the health of patients and our health care system. As health care delivery evolves, it will be important to look at the importance of the patient-family physician relationship and its impact on preventing the unnecessary use of hospital services for ACSCs and FPSCs.

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A3.2 Paying for Primary Care: Payment Reform and Primary Care Physician Behaviour in Ontario

Presented by **RAISA DEBER** Professor, University of Toronto

The Ontario government introduced several alternatives to fee-for-service (FFS) payment for primary care physicians (PCPs), including age-sex adjusted capitation (CAP). There is concern that this reform encouraged PCPs to avoid sicker more complex patients due to incentives inherent in the new payment schemes. This study analyzed whether this occurred. We conducted a series of studies using patient and PCP level administrative data (1999/00 – 2010/11) from the Institute for Clinical Evaluative Sciences to analyze changes in patient cost and case-mix across payment models in Ontario. Our data captured all Ontarians and PCPs in FFS, enhanced-FFS and CAP payment models during the study period. To ensure our findings were robust we analyzed PCP characteristics associated with selection into different payment models, and controlled for this selection effect in our analysis of the impact of changes in payment incentives. In our studies we used both non-parametric (relative distribution) and parametric methods (multinomial selection models). Analysis is ongoing, but our results demonstrate that there were differences in cost and case-mix across payment models. PCPs in CAP models were more likely to have healthier, wealthier and lower cost patients than PCPs in FFS models. While there is evidence that PCPs did alter the composition of their rosters, the majority of the differences observed across payment models were a result of PCPs selecting payment models based on pre-existing patient and practice characteristics. PCPs in CAP models were also less likely to enroll sicker/higher-cost patients, but continued to treat these patients off-roster. These findings suggest that PCPs did respond to changes in payment, and while there was evidence that PCPs did alter the case-mix of their patient rosters following a switch to CAP, much of the observed differences existed prior to reform.

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A3.3 The impact of Quebec primary healthcare (PHC) reform on continuity of care

Presented by **PIERRE TOUSIGNANT** Consultant, Public Health, Montreal

This study answers the question: did PHC reform initiated in 2003 influence continuity of care for all users of care and for patients with chronic disease? We focused on the following reform elements: patient registration in FMGs (Family medicine groups) or as vulnerable and we use diabetes as tracer condition. We used administrative databases (ADB) describing medical services for Montrealers aged 20+ between 2000 and 2010. We developed new measures of continuity based on year-to-year follow-up with known providers distinguishing between the physician seen most often, known family physicians, known specialists, all known physicians. We analyzed users of care and diabetics divided into four exclusive groups where memberships remained the same for the whole period: registered in FMGs, registered as vulnerable, combined registration and not registered. Diabetics were identified with a validated algorithm using ADB. All results are controlled for age, morbidity (ACG-RUB) and socio-economic status. In users, continuity offered by all physicians increased for all registered groups especially after 2003 (range 64-82%). For diabetics this continuity was very high (range 84-89%) and stable. For the users registered in FMGs, continuity offered by known family physicians increased more than continuity offered by the physician seen most often, suggesting shared follow-up in FMGs. These findings are similar but the differences are less pronounced in diabetics. Users and diabetics not registered had continuity offered by all physicians the lowest (users 60%; diabetics 82%) and stable. Their continuity offered by known specialists increased (users 26 to 28%; diabetics 46 to 51%) while the two other types decreased. High continuity was associated with reduced hospitalizations and visits to emergency. The PHC reform produced positive results regarding continuity of care especially in users and diabetics registered in FMGs where shared follow-up is favored. For users and diabetics, the source of continuity offered to registered patients shifts from specialists to family physicians while the reverse is true for patients not registered.

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A3.4 A conceptual framework for primary care performance measurement and reporting

Presented by **JULIA LANGTON** Research Associate, University of British Columbia

Primary care services are a vital part of a high performing health system yet performance measurement in primary care lags behind the hospital sector. Our objective is to develop a conceptual framework for primary care performance measurement and reporting. We reviewed existing national performance measurement systems, models of primary care service delivery, and best practice in performance measurement. We also sought input from a Pan-Canadian multi-disciplinary research team that includes senior primary care researchers, policy makers, and practitioners within Canada and internationally. Our proposed framework is designed specifically for primary care performance measurement and reporting based upon the strengths and limitations of existing systems, the nature of primary care service delivery, and the patient populations served by primary care. Many reporting systems are not grounded in a framework and tend to focus on disease-specific measures or the ‘average’ patient. This suggests that measurement systems may not be aligned with the patient populations served by primary care providers such as patients with multiple complex chronic conditions. Our proposed framework is a matrix structure that measures primary care performance (e.g., access, continuity, coordination) by patient groups. The patient groups were selected to be relatively homogeneous in terms of health care needs ranging from those who require less complex care (healthy patients) through to those with the most complex primary health care needs (e.g., ≥ 3 advanced chronic conditions). Population segmentation is an alternative to complex case-mix adjustment methods that are recommended when producing comparative performance information. Presenting performance information by patient subgroups is beneficial for quality improvement efforts so that clinicians and policy makers are aware of specific patient groups and types of care where efforts need to be targeted (e.g., geographical areas or health services with a higher proportion of complex, vulnerable patients).

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A4 CHRONIC DISEASE MANAGEMENT AND AGING / GESTION DES MALADIES CHRONIQUES ET VIEILLISSEMENT

Fontaine F

A4.1 Improving Care and Support for Unpaid Caregivers in Ontario: Findings from a Citizen Panel

Presented by **MICHAEL WILSON** Assistant Director, McMaster Health Forum

Despite their crucial role in caring for seniors, support for unpaid caregivers can be lacking, inconsistently available or not aligned to their values, needs and preferences. Our objective was to convene a panel of citizens to share their ideas and experiences related to improving care and support for unpaid caregivers. We convened a panel with a diverse group of 10 Ontario citizens. We recruited participants using explicit criteria from the AskingCanadiansTM panel, which aimed to ensure fair representation among the diversity of citizens likely to be affected by the problem. Panel participants were provided with a citizen brief that summarized in lay language what is known about the underlying problem, three options to address the problem and implementation considerations. The panel consisted of facilitated deliberations that were designed to allow panel participants to share their views and experiences based on each of these areas. During the deliberations, four challenges were consistently raised: 1) caregivers' heavy burden can cause anxiety about its impact on their own and other's health; 2) financial and employment impacts of caregiving are substantial; 3) many caregivers don't know about available services or how to access them; and 4) caregivers' roles are not fully recognized or supported. During the deliberations about the options, two values-related themes emerged with some consistency: 1) competence (i.e., educating and training unpaid caregivers to provide optimal care, but also to clearly define the scope of their duties) and 2) empowerment (i.e., supporting unpaid caregivers to become strong advocates for their loved ones and for themselves, and equipping them with practical tools to manage the complex care needs of their loved ones). Participants noted two initiatives that they thought could bring about change: 1) advocacy activities targeting health-system leaders and elected officials to implement necessary policies, programs and services; and 2) activities to promote public dialogue and experiential learning to build sensitivity to the needs of older adults and their unpaid caregivers.

Co-Author(s): François-Pierre Gauvin, McMaster Health Forum / John Lavis, McMaster Health Forum / Jenny Pleog, School of Nursing, McMaster University

A4.2 The Relationship Between Multimorbidity and Causes of Hospital Readmissions at 30 Days And One Year

Presented by **ARLENE BIERMAN** Professor, University of Toronto

Rates of hospital readmission increase with the number of comorbid conditions and comorbidities are often responsible for potentially avoidable readmissions. Thirty day readmission rates reflect hospital care and care transitions. One year readmission rates reflect chronic disease management in the community. An understanding of the contribution of comorbid conditions is needed to reduce readmission rates. Using linked population-based administrative data from Ontario Canada from FY 2011 and 2012, a longitudinal cohort study of acute myocardial infarction (AMI), congestive heart failure (HF), chronic obstructive pulmonary disease (COPD) and hip fracture patients discharged after an index hospitalization determined disease-specific, concordant (readmission diagnosis related to index condition), and discordant (readmission diagnosis unrelated to index condition) causes of hospital readmissions in each cohort at 30-days and one year. Multivariable regression models were used to assess the contribution of markers of patient complexity including multimorbidity to readmissions for discordant comorbidities. Cohorts included 29,607 admissions for AMI; 22809 for COPD; 20,095 for HF; and 12857 for hip fracture. Age, sex, and readmission rates varied across cohorts. There was a high burden of readmissions at one year. For example, 18.5% of HF patients were readmitted at 30 days and 57.5% at one year. Across all cohorts the proportion of readmissions attributable to discordant comorbidities was greater at one year than 30 days ranging from 44% for AMI to 91% for hip fracture. Geriatric conditions (i.e, dementia, decubiti) contributed to readmission rates. Patient complexity was associated increased rates of readmission at 30-days and one year as well as with an increased proportion of readmissions attributable to discordant comorbidities. After hospital admission for common conditions, discordant comorbidities are responsible for many hospital readmissions. The burden of discordant admissions increases over a year. Patient-centered models of care to effectively manage multimorbidity are needed to reduce rates of avoidable hospitalizations among older patients with multimorbidity and complexity who comprise the majority of patients admitted for these conditions.

Co-Author(s): Jun Guan, Institute for the Clinical Evaluative Sciences / Diva Turial, University of Toronto / Therese Stukel, Institute for the Clinical Evaluative Sciences

A4.3 An evaluation of the experiences of Parkinson Society Saskatchewan members and their caregivers

Presented by **TAMARA CHAMBERS-RICHARDS** WRTC Studentship, University of Saskatchewan

Parkinson's is a progressive neurodegenerative disease with no known cure that affects as many as 100,000 Canadians. Experiences of Parkinson's Society Saskatchewan (PSS) members and their caregivers were evaluated to determine the non-profit organization's achievement of its mandate of improving quality of life through advocacy, education, research and support services. Saskatchewan people with Parkinson's (PWP) and their caregivers were surveyed online and in print through an adapted questionnaire developed by the PSS' counterpart in British Columbia. A semi-structured interview guide was used to conduct four in-depth interviews of PSS members who had direct involvement in the organization. Four focus groups, each with ten to fifteen PWP and their caregivers, were conducted in urban and rural Saskatchewan communities. Data were collected from September to December 2013. Descriptive statistics were used to analyse the survey data. The audio-taped key informant interviews and focus group discussions were transcribed and thematic analyses were undertaken. A total of 40 questionnaires were completed, with 23 from PWP and 17 from caregivers. A total of 52 participants contributed to the focus group discussions. PWP found it difficult to get dressed (71%), walk (65%), eat (66%) and speak (61%). Memory (82%), independence (77%), motivation (69%) and social conduct (67%) were most adversely affected. Access to Parkinson-specific therapy (e.g. swallowing and walking) (77%), and a multidisciplinary movement disorder clinic (40%) were the greatest needs identified by PWP. Respite services and improved access to neurologists were the greatest needs identified by caregivers. Service improvement themes included expansion of services for highly progressed patients, enhancing advocacy for increased neurologists and dissemination of research findings, care support, additional support groups, and increased collaboration among health professionals. There are a number of opportunities for the PSS to expand its mandate. These include establishing networks of allied health care professionals specializing in the care and management of PWP, disseminating information on successful treatment innovations, and engaging health ministries on behalf of PWP for long-term care support.

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A4.4 Predictors of six-month mortality subsequent to chronic dialysis initiation among an older adult population

Presented by **JAMES WICK** MSc Student, University of Calgary

The initiation of chronic dialysis is a common treatment for kidney failure, with increasing incidence amongst older adults in recent years. Early mortality after dialysis initiation is common, especially among older adults. We sought to determine predictors of all-cause mortality following chronic dialysis initiation in an older adult population. We linked administrative data sources to identify a cohort of older adults (age 65+) in southern Alberta who began chronic dialysis between May 2003 and March 2012. The potential predictors were described overall, and by outcome status. We used Cox regression to determine predictors of all-cause mortality within six months after dialysis initiation. Models were adjusted for demographic characteristics, comorbid conditions, pre-dialysis care, initial dialysis modality, and measures of health system usage. Patients were censored at outmigration, kidney transplant, death, or study end. Backward elimination of non-significant predictors created a parsimonious model. 1,077 older adult patients initiated chronic dialysis during the study period (59.1% male, mean age 75.3), of whom 194 (18.0%) died within six months of initiation. In the multivariate model significant predictors of 6-month mortality were: age ≥75y vs. 65-74y (Hazard Ratio [HR]: 1.40; 95% CI: 1.04-1.89); cancer (HR: 1.57; 95% CI: 1.17-2.13); congestive heart failure (HR: 1.49; 95% CI: 1.10-2.02); dementia (HR: 1.58; 95% CI: 1.01-2.46); liver disease (HR: 3.37; 95% CI: 1.99-5.70); and prior emergency department use (HR: 12.78; 95% CI: 1.78-91.78). Factors associated with a reduced risk of mortality were initial peritoneal vs. hemodialysis (HR: 0.35; 95% CI: 0.18-0.67); pre-dialysis care (HR: 0.44; 95% CI: 0.33-0.59) and diabetes (HR: 0.68; 95% CI: 0.51-0.92). Patient demographics, comorbidities, pre-dialysis care, dialysis modality, and health system use are associated with risk of early all-cause mortality after chronic dialysis initiation in older adults. These results will be used to develop a clinical risk prediction tool for early mortality in older adults, facilitating patient and clinician decision making.

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A5 KNOWLEDGE TRANSLATION AND EXCHANGE / TRADUCTION ET ÉCHANGE DE CONNAISSANCES Fontaine G

A5.1 Modelling the retirement timing of Canadian nurses using a panel survey

Presented by **LADY JOSEF BOLONGAITA** PhD Student, University of Toronto

An aging population typically increases the need for nurses; however, nurses are also aging as 40% of today's nurses will be retiring over the next 15 years. Due to the negative impact of a nursing shortage, there is a need to identify factors that influence the decision of nurses to work. This study aims to establish the impact of health and job characteristics on nurses' decisions to retire. The study sample consists of nurses who are at least 50 years old in the Survey of Labour and Income Dynamics, which is a longitudinal survey. Since health impacts the decision to work and work impacts health, I am using a two-stage residual inclusion model. The first stage identifies factors that are related to self-assessed health. I will then take the residuals from the first stage and use it as an explanatory variable in the second stage, a mixed logit model that looks into the factors that determine labour force participation (working fulltime, part time or retired) of nurses. My preliminary findings show that health plays an important role in the retirement timing of nurses – the worse the health status is, the more likely a nurse is to retire. As for job characteristics, sector of employment (hospital, community, long term care or non-health sector), unionization, and having employer based pension affect the decision to retire, while shift type (regular days, nights or irregular) does not. The study's findings will be used to inform programs and policies aimed at retaining late career nurses.

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A5.2 The Impact Of Legislation On Expanded Scopes Of Practice: Prescribing by Optometrists and Pharmacists and Test Ordering by Physiotherapists in Ontario

Presented by **IVY BOURGEAULT** CIHR Chair in Gender, Work and Health Human Resources, University of Ottawa

Our project focused on a policy analysis of the recently implemented scope of practice changes for pharmacists, optometrists and physiotherapists. The purpose of this project was to identify activities, strategies and collaborations taking place at these various levels in preparation for the implementation of these new regulatory changes. The approach to this policy analyses addressed the educational, regulatory, practitioner and overall system implications, both real and perceived, of Bill 171 and Bill 179. The methods included (a) an environmental scan and a review of available documents from these professions pertaining to these Bills, (b) key informant interviews with stakeholders within and beyond these professions across Ontario to more fully describe current activities and perceptions, and (c) a survey of practitioners regarding their attitudes and practices related to the regulatory changes. The overarching theme was that regulatory changes seem to be more prescriptive and theoretical than practical. For pharmacy and optometry including drug lists rather than categories are considered too specific for a self-regulating health profession with professional standards and a college whose mandate is to protect the public and regulate professionals. In the case of physiotherapy, it was clear that the expanded scope of practice under Bill 179 was not entry-level to practice skills, and as such, the university programs were not planning any significant alteration in curriculum. Some institutions were planning to provide continuing educational courses that would be related to the new controlled acts. Overall, most expressed concern with the length of time from proclamation to making changes in practice. All professions have been pro-active with respect to regulatory changes and have been diligent in planning for the consequent changes in education, assurance of public safety, and encouraging members to react positively to these changes. Generally the professions are enthusiastic about regulatory change but uncertain about actual implications.

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A5.3 Part-time Nurse Faculty Intent to Remain Employed in Academia

Presented by **ERA MAE FERRON** Project Coordinator, Public Services Health & Safety Association

Retaining qualified part-time nurse faculty in academia is a key component to manage the overall shortage of nurses. The objective of this study was to test and refine a model of part-time nurse faculty intent to remain (ITR) employed in the academic organization. This study used a cross-sectional survey design. A total of 282 part-time nurse faculty employed within Ontario, Canada colleges or universities were invited to participate. Survey instruments and items measured demographic, workplace, nurse responses to the workplace, and external variables. The survey was tested for feasibility prior to administration. Survey administration followed the Tailored Design Method (Dillman et al., 2009). Eligible participants were contacted up to 5 times over a 10-week period. Correlation and multiple regression analyses were conducted using data from 119 respondents (47.6% true response rate). Seven variables were found to influence ITR. The resulting model indicated that the older the part-time nurse faculty member, the lower the level of ITR and the more years worked in the organization, the higher the level of ITR. The more opportunities perceived to exist outside of the employing organization, the higher the level of ITR. In the workplace, the more support from the leader, the more formal or informal recognition received, and the more fair work procedures were perceived to be, the higher levels of part-time nurse faculty ITR. Additionally, the more satisfied part-time nurse faculty were with their job overall, the higher their level of ITR. Job satisfaction also functioned as a mediating variable. To encourage part-time nurse faculty to remain employed in academia, leaders should focus on enhancing overall job satisfaction. Effective strategies may include formal or informal acknowledgement of good performance, consistent verbal and behavioural support, and procedural decisions (such as performance evaluations and pay raises) made in a fair manner.

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A5.4 Diversity in Health Human Resources – Working with Employers towards Integration of Internationally Educated Nurses (IENs) into the Workforce

Presented by **DINA IDRISS-WHEELER** Research Coordinator, McMaster University

To create research-based resources and work with employers to navigate the regulatory system, locate assessment and bridging programs, enhance retention and achieve successful workforce integration of IENs. Innovative and web-based resources will be featured; results of the evaluation presented and future directions resulting from project outcomes will be introduced. A mixed-methods approach to data collection included quantitative on-line surveys and qualitative interview and survey methods with relevant stakeholders (IENs, employers, educators, regulatory bodies). Outcome and process measures include analysis of website use, participation in workshops, and results of the online surveys and interviews. The resources were created based on research findings to provide easy, accessible information for employers and stakeholders involved in hiring and integrating IENs into the workforce. Employers were engaged in the development, creation and ongoing evaluation of the innovative resources to validate the products' relevance to their needs. Collaboration among key stakeholders (government, healthcare organizations, community agencies, regulatory bodies, educational institutions, nursing organizations) is essential to facilitate recruitment, integration and retention of IENs. Outcomes of this research include: Employer Web Guide (ien.oha.com); print copy of the IEN Employer's Guide, and Workshops. These products highlight leading practices which are shared across the province and country to illustrate unique ways employers have embraced diversity. There is a need to provide healthcare organizations with leading human resource management practices and strategies, and help them understand the value of IENs and the key issues affecting IEN recruitment and retention. Issues and strategies presented are relevant to Ontario and other provincial and international jurisdictions struggling with nursing shortages and trying to capitalize on potential sources of workforce supply. IENs bring experience, ideas, and unique cultural knowledge, language, and communication skills to healthcare organizations. With proper resources and increased awareness, employers can complement their hiring practices to include IENs. Ultimately, effective and efficient workforce integration of IENs will lead to provision of quality care in a diverse Canadian population.

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A6 HEALTH CARE COSTS AND CHRONIC DISEASE / LE COÛT DES SOINS DE SANTÉ ET DES MALADIES CHRONIQUES

Fontaine H

A6.1 A cause for discomfort – cost and use of healthcare by Ontarians with chronic pain

Presented by **MARY-ELLEN HOGAN** PhD Student, Leslie Dan Faculty of Pharmacy, University of Toronto

Chronic pain affects more people than heart disease and diabetes combined. We aimed to determine healthcare use and cost in cohorts of Ontarians with and without chronic pain using administrative data as part of larger project to estimate the total direct medical cost attributable to chronic pain. We conducted a retrospective cohort study from September 2000 to December 2011. Subjects with and without chronic pain were identified from a chronic pain question in three cycles of the Canadian Community Health Survey: Cycle 1.1, 2007-08 and 2009-10. These data are linked to Ontario administrative healthcare data. The number of physician visits, hospital stays and all publicly funded healthcare costs were totalled for one year following the subject's survey date. Costing followed methods established by the Canadian Agency for Drugs and Technology in Health and the Health System Performance Research Network. The sample included 100,651 aged 12 and over. Chronic pain was reported in 20% of respondents. The cohort with chronic pain had an average age of 55 years compared to 45 in the cohort without chronic pain and they were more likely to be female (61% versus 53%). They had greater morbidity as measured by the Adjusted Clinical Groups system (3.7 versus 2.6 collapsed Aggregated Diagnosis Groups). The pain cohort had more physician visits per year (16 versus 10 in the group without pain) and 26% of patients with pain had at least one hospital stay versus 14% without pain The mean annual cost of all healthcare in the group with chronic pain was $4,770 (CAD $2013) versus $1,940 in those without (all p<0.01). The prevalence of chronic pain in Ontarians is high. Patients with chronic pain have greater morbidity, more physician visits and are more likely to be hospitalized than those without chronic pain. Healthcare costs in those with chronic pain are more than twice that of patients without chronic pain.

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A6.2 Long-term physician costs associated with obesity

Presented by **MUSTAFA ORNEK** PhD Candidate, McMaster University

Cost of obesity studies traditionally had short-term perspective on costs. We estimate the long-term physician cost of obesity to the health care system in Ontario using linked administrative data and novel econometric techniques. This study is unique in the literature by its utilization the available long-term administrative cost data at McMaster University. We link the Canadian Community Health Survey (CCHS) 2000/01 with Ontario Health Insurance Plan records from 1999/00 to 2009/10. The former provides the information on height and weight and socio-demographic attributes of the individuals, and with the latter we matched the physician service utilizations of these individuals from Ontario. We use non-parametric and semi-parametric regression methodologies to investigate the relationship between the total average annual physician costs and body mass index (BMI), while controlling for socio-demographic attributes. Additionally, we present the dynamics of annual physician costs per BMI category over 11 years by adopting generalized linear regression method. Our results show that in terms of higher physician costs, obesity is less of a concern for males than females. For males, obesity is associated with higher physician costs only at older ages, but for females higher BMI is associated with higher physician costs in all age groups. Moreover, our results show that for both genders morbid obesity is an apparent issue and associated with high physician costs. Annual regression results show that the cost difference between normal weight individuals and overweight or obese individuals is growing over time, indicating that low short-term cost differences may in fact be considerably higher over time. Considering the fact that the utilization rates and the average physician costs among females are consistently higher than males, a policy intervention that aims to manage the physician billings should prioritize the obesity management in female population. As for morbidly obese individuals, more focused approach is the most appropriate.

Co-Author(s): Mustafa Ornek, McMaster University / Arthur Sweetman, McMaster University

A6.3 Healthcare costs for 17 chronic conditions in Ontario

Presented by **WALTER WODCHIS** Associate Professor, University of Toronto

The high and growing cost burden of chronic conditions is a highly cited feature of most western countries. The objective of the present study was to estimate the incremental costs associated with 17 common chronic conditions using matching methods allowing for direct comparison of these costs. A population-based, retrospective cohort of all individuals in Ontario with at least one of 17 common chronic conditions as of April 1, 2011 was identified (n=7,548,806). Examples of the 17 conditions included renal, cardiovascular, pulmonary, cancer and mental health conditions. For each condition, affected individuals were first matched to individuals without such condition according to age, sex, community residency and then propensity scores based on rurality, John's Hopkins ACGs, income, and provincial region. Differences in health system costs between cases and matched controls were then calculated and presented as the attributable cost associated with each condition over a one-year period. For each condition a 10 percent random sample was selected for preliminary analyses resulting in sample sizes ranging from 1,247 for acute myocardial infarct to 317,822 for osteoarthritis. Renal failure had the highest incremental average total system cost difference compared to controls of $8,433 per year, followed by CHF ($6,788) and dementia ($5,732). Osteoarthritis was associated with lowest incremental total cost ($264/year) while patients with osteoporosis had average annual costs that were comparatively slightly lower (-$510/year) than matched patients from the cohort. For most conditions hospital care costs contributed the largest proportion of incremental cost difference except for dementia (long -term care) and rheumatoid arthritis (medications). Costs adjusting for days alive were qualitatively similar to total system costs for most conditions. This study provides the first comparative total one year health system and sector-specific incremental cost differences for 17 common chronic conditions allowing for explicit knowledge about which conditions cost the most to treat. Variation in average costs was marked. Comparatively lower costs for individuals with osteoporosis was somewhat surprising.

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A6.4 Projection of health care costs at the end-of-life: An exploratory cost analysis by health care sectors in Canada, from 2015 to 2031

Presented by **AMY T.M. HSU** Research Fellow, The Ottawa Hospital Research Institute

As the population ages, planning for care at the end-of-life (EOL) becomes a central component in health system budget planning. The aim of this study was to project health care costs at the EOL, and examine the impact of demographic changes on expenditures in various health care sectors. A population-based cohort of decedents was created from Ontarians over 20 years old who died between April 1, 2010 and March 31, 2013. Using a set of linked, health administrative databases, we estimated health care cost in the last year of life for each decedent, across various health sectors, including: hospitalizations, long-term care (LTC), home care, complex continuing care (CCC), and physician services. Generalized linear models were used to predict health care costs in the last year of life, controlling for age, sex, marital status, health status, place of death, rurality of residence, and year of death. Mortality was simulated using Statistics Canada's microsimulation Population Health Model (POHEM). Average costs, by age and sex, from the Ontario population were then applied to simulated Canadian deaths from 2015 to 2031. Preliminary results revealed the total cost of EOL care among Canadians adults could increase by 32.8% over the next 15 years, from an estimated $6.7 billion in 2015 to $8.9 billion in 2031. This is equivalent to an average increase of 1.9% per year. The largest increases were in acute care ($1.2 billion), followed by LTC ($309 million). Results from our sensitivity analyses suggest projected costs may vary by ±3.5% per year, depending on life expectancy assumptions. Projections of health care expenditure at the EOL offer useful information for health system planning. Results from this short-term projection suggest that demographic changes will not inflict significant rises (<2% annually) to overall health care costs at the EOL among Canadians.

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A7 PANEL / PRÉSENTATION EN PANEL Mont Royal

A7 **What can nurses do to solve the primary care woes of Canadian healthcare systems?**

Comment les infirmières peuvent-elles résorber les dysfonctionnements en soins primaires des systèmes de santé canadiens ?

Presented by **DAMIEN CONTANDRIOPOULOS**, Université de Montréal; **ESTHER SANGSTER-GORMLEY**, University of Victoria; **ANNIE RIOUX**, University of Ottawa; **ISABELLE BRAULT**, Université de Montréal; **BERNARD ROY**, Université Laval

When compared to those of other rich countries, Canada's primary healthcare delivery systems' performance is found to be lagging in many regards. Improving accessibility, comprehensiveness and continuity of care are pervasive challenges in most provinces. Moreover, Canada's health expenditures are among the highest in the world, yet its levels of available healthcare resources (HR and beds) lags behind other. In technical terms, healthcare delivery systems in Canada are thus characterized by very high unit costs. Given the demographic shifts of recent and coming years, the data thus suggest that treating Canada's future population according to current care models will not be sustainable. Care delivery systems in Canada will have to evolve significantly to preserve our collective capacity to offer publicly funded, comprehensive and universal coverage for health services. There is a large consensus that primary care teams providing services with high accessibility, continuity, and comprehensiveness have a key role to play in increasing the overall efficiency of the healthcare system. Similarly, there is compelling evidence that nurses, both nurse practitioners and registered nurses, can make significant contributions to the functioning and success of A recent review of the structures (size, staffing, composition, etc.) and processes (roles, scope of practice, care processes, etc.) of such nurse-intensive primary care teams revealed that there is only limited evidence available to guide the redesign of primary care delivery structures. The objective of the panel is to bring together researchers with complementary ongoing research projects who can inform the debate on nurses' potential contribution to improving the accessibility, comprehensiveness and continuity of primary care. Panel format: Each of the five presenters will have 8 minutes to give an overview of their research on the topic and to identify core elements that can help answer the question: What can nurses do to solve the primary care woes of Canadian healthcare systems? This will be followed by a 20-minute discussion among panel members and 15 minutes of exchange with the audience. Panel composition: Damien Contandriopoulos (panel chair) PhD, University of Montreal: Results from the realist review on nurses' contribution to primary care teams and preliminary results from a CIHR-funded project to implement and evaluate pilot nursing-intensive primary care teams. Esther Sangster-Gormley PhD, RN, ARNP (Florida, US), University of Victoria This presentation will be based on results of mixed methods study of the integration of nurse practitioners in British Columbia. Annie Rioux / Amélie Perron (University of Ottawa) This presentation will be based on the results of a multi-site ethnographic study of the integration of nurse practitioners and interprofessional collaboration modalities in three different Primary Health Care delivery models in Ontario. Isabelle Brault (University of Montreal) This presentation will be based on preliminary results on the implementation process of a nursing primary care clinic for patient with chronic diseases in CSSS Nord de Lanaudière (Québec). Bernard Roy (Université Laval) This presentation will be based on preliminary results on the implementation process of a clinic of primary nursing care in a popular neighborhood of Quebec City.

Wednesday, May 27, 2015 – 10:00am - 11:15am SESSION B

Le mercredi 27 mai 2015 – 10 h 00 - 11 h 15 SÉANCE B

B1 PHARMACEUTICAL POLICY / POLITIQUE PHARMACEUTIQUE I Fontaine C

B1.1 **Exploring the effect of cost on adherence to prescription medicines from the patient's perspective**

Presented by **LAURIE GOLDSMITH** Assistant Professor, Simon Fraser University**; ASHRA KOLHATKAR** UBC Centre for Health Services and Policy Research

While prior work has indicated that cost-related non-adherence (CRNA) to prescription drugs exists for many Canadians, we know little about the experience of patients who report CRNA. To learn more about these experiences, we conducted the first (to our knowledge) qualitative examination of CRNA in Canada. This qualitative study was designed to provide an in-depth understanding of the CRNA experience and to ground this within the complexity of medication adherence. We conducted semi-structured, in-depth interviews with adults with experience with CRNA in Vancouver and Prince George, British Columbia. Participants were purposefully recruited through posters in community settings and health care settings, and online and newspaper advertisements. Our initial sampling criteria used key characteristics commonly identified with CRNA in previous research; we refined our purposefully sampling criteria as we learned more about CRNA. We conducted thematic analysis and explicated relationships between central and supporting themes. We interviewed 20 men and women of a various ages, income, health conditions, and health insurance status. Significant CRNA examples existed across all incomes and insurance status; being of low income or not having adequate insurance was particularly challenging. Participants recounted decision-making using a variety of factors (e.g., health condition, belief in the particular medicine, side effects, cost, provider relationship), with the algebra often varying by drug type within the same individual. Participants also mentioned the importance of trust and faith in all providers and services and the relationship between those feelings and CRNA decisions. The link between cost and prescription adherence is often moderated by a number of factors including the quality of relationships with providers and the system as a whole. This study broadens and deepens our understanding of how CRNA works on its own and in relationship to other patient experience issues and to health care system design. There appear to be multiple typologies of CRNA, with each typology having different policy implications.

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B1.2 **Elderly patients' risk of receiving potentially inappropriate prescriptions: a population-based study of prevalence and determinants in British Columbia, Canada**

Presented by **STEVE MORGAN** Professor, University of British Columbia

Studies of inappropriate prescribing in Canada seldom adjust for potentially relevant medical diagnoses. We sought to address this gap while studying socio-demographic factors associated with exposure to potentially inappropriate prescriptions (PIPs) among elderly British Columbians. We used population-based, de-identified health datasets for 2011. We classified PIP exposures for persons over age 65 using the 2012 Beers criteria. To account for cases where drugs may be warranted given patient health status, we implemented the Beers criteria with adjustments for relevant medical diagnoses as well as the dose and duration of drug use. We ran logistic regressions to study the determinants of exposure to PIPs, including a range of socio-demographic, health status, and health system variables. Crude rates of exposure to PIPs in 2011 were 43.0% for elderly women and 34.8% for elderly men. After adjusting for dose and diagnosis information, 34.3% of elderly women and 28.6% of elderly men received one or more PIP in 2011. Factors associated with higher risk of PIP exposure include low-income, poor health status, rural dwelling, concomitant drug use, living in a long-term care facility, and receiving care from multiple (5+) doctors in the year. Women of Chinese ethnicity and living in a neighbourhood with a significant share of population (20% or more) of Chinese ethnicity were at lower odds of PIP exposure than other women. After adjusting for these and other explanatory factors, women had 19% higher odds of PIP exposure than men. Much more needs to be done to improve the quality of prescribing medicines to elderly patients in BC, as one in three BC seniors received a potentially inappropriate prescription in 2011. Women are at particularly high risk, even after adjusting for factors that contribute to the risk of inappropriate prescribing.

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B1.3 A time-trend economic analysis of cancer drug trials

Presented by **SONYA CRESSMAN** Health Economist, The Canadian Centre for Applied Research in Cancer Control

Scientific advances have led to the discovery of novel treatment approaches with high prices. The cost to publicly fund cancer drugs may threaten the sustainability of drug budgets. There is fear that health benefit gains are diminishing over time while the economic evidence to support funding decisions is limited. To assess the additional costs and benefits gained from oncology drugs over time, we used treatment protocols and efficacy results from the US, Food and Drug Administration records to calculate cost-effectiveness ratios for drugs approved to treat first and second-line metastatic or advanced breast, colorectal and non-small cell lung cancer between the years 1994-2013. We assessed reimbursement recommendations reached by Health Technology Assessment agencies in the UK, Australia and Canada. Cost-effectiveness ratios were calculated for 50 drugs approved by the US regulator. The more recent approvals were based upon surrogate efficacy outcomes and were extremely costly, often triple the costs of drugs approved in previous years. Over time, the effectiveness gains have increased for some cancer indications; however, for other indications (non-small cell lung and second-line colorectal cancer) the magnitude of gains in effectiveness decreased. Reimbursement recommendations for drugs with the highest cost-effectiveness ratios were the most inconsistent. Evaluation of the clinical benefits that oncology drugs offer as a function of their cost has become highly complex and for some clinical indications, incremental health benefits are diminishing over time. There is an urgent need for more economic evidence from oncology drug trials and systematic processes to inform funding decisions.

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B1.4 Cost-Drivers of Public Drug Plans in Canada

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

This analytical report analyzes the recent trends in prescription drug expenditures in a select number of Canadian public drug plans and provides insight into the factors that have impacted expenditure levels in 2012/13, as well as it monitors the changes in the pricing and reimbursement for the same year. The report employs a cost driver model that quantifies the contribution of the various effects that drive change in drug expenditures. Four broad categories of effects are considered: demographic effects, volume effects, price effects and drug-mix effects. Important sub-effect are also analyzed. The main data source for this report is the National Prescription Drug Utilization Information System Database, CIHI database. The results are presented for a select number of public drug plans with available data: Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia and Prince Edward Island and Health Canada's Non-Insured Health Benefits (NIHB) drug plan. The study focuses on the cost levels and drivers in 2012/13 fiscal year and provides a retrospective look at trends since 2008/09. The rates of change in drug expenditures have been declining in recent years, with expenditures in 2012/13 up just by 0.6%. The low rates of change were driven by ample opposing "push" (positive) effects and "pull" (negative) effects which nearly off-set each other and result in a relatively low net change. On the one hand, price effects had an important "pull" effect on drug cost levels, with generic price reductions and generic substitution resulting in important savings in 2012/13. On the other hand, demographic, volume, and drug-mix effects had important "push" or positive effects on drug cost levels, which off-set most or all of the cost saving effects of generic substitution and price reduction discussed above. For biologics, rapid growth since 2007/08 in three therapeutic classes has driven growth. The cost saving effect of generic price reforms and the 'patent cliff' may taper off as policies and the market environment evolve, and the long term trend driven by the push effects may resume, with positive rates of growth in public drug plans that may reach double digits rates.

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B2 CHRONIC DISEASE MANAGEMENT I / GESTION DES MALADIES CHRONIQUES I

Fontaine D

B2.1 Impact of Telehomecare on patients' quality of life and disease-management skills

Presented by **VALERIA RAC** Associate Program Director, Director Clinical Research Division, THETA Collaborative

Telehomecare was introduced in Ontario in 2007 to patients with chronic obstructive pulmonary disease (COPD) and heart failure (HF). Literature suggests it might improve their quality of life and self-management; however results are not conclusive. This survey evaluates impact of Telehomecare on patients' quality of life, disease-management skills and satisfaction.

During the program participation, COPD and HF patients transmit their health data via remote monitoring devices on a daily basis, and have weekly consultations sessions with designated nurses to discuss their health goals. Prospectively enrolled patients (COPD: n=19 and HF: n=22) were recruited between June to August, 2014 and administered telephone surveys at baseline, one, two and three months after Telehomecare program enrollment. Five validated questionnaires were used to capture the patients' quality of life (EQ-5D, SF-12), program satisfaction (CSQ-8), Telehomecare perception (TMPQ-17) and self-management skills (Stanford Self-Efficacy Scale-33). Descriptive statistics was used to summarize survey responses. Overall, both COPD and HF patients reported high satisfaction and positive perception of the program which remained consistent across the time. Compared with COPD patients, there was a slight trend in improvement in several components of self-management skills (exercising, disease and breathing management, depression management, communication with physician, participating in social activities) with time among HF patients. HF patients also showed higher physical and mental composite scores compared with COPD patients. Health profile did not differ significantly between the two groups at baseline; however HF patients reported fewer problems related to self-care and mobility and anxiety/depression with time. HF patients reported higher scores on visual analogue scale at all-time points in comparison to COPD population. These results suggest that Telehomecare has a wide acceptance among patients and has a more positive impact on HF patients' disease management skills and quality of life.

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B2.2 Implementation and evaluation of an integrated interdisciplinary primary care program for the management of low back pain

Presented by **SARA AHMED** Associate Professor, McGill University

An interdisciplinary team approach is recommended for individuals with low-back pain (LBP) lasting longer than 6 weeks with standard treatment. The objective of this study was to evaluate the implementation process and impact of a novel 6-month integrated interdisciplinary program on primary care services and patient reported outcomes. Individuals with LBP ≤ 1 year were referred to the program by their primary care physician (PCP) from four health regions. The program includes: six months of early intervention and prevention, evidence-based management of chronic pain including self-management support delivered by a physical therapist, physician, nurse, and psychologist, and follow-up by the PCP. Changes in the Brief Pain Inventory (BPI) intensity and interference scale, Patient Health Questionnaire (PHQ-9), Short-Form 12 physical (PH) and mental health (MH) scale, and self-efficacy scale were evaluated between baseline and 6 months. The STarT Back was completed at baseline to evaluate prognostic risk for poor outcomes. To date 190 individuals were accepted in the program, 38 dropped out before the end of the 6-month period, and 70 completed the 6-month intervention. The average age was 51 (SD 17), and 71% of participants were women. Moderate to severe risk of chronicity (STarT Back scale) was present in 75% of patients. At 6 months there was significant and clinically meaningful mean change on the BPI intensity (2.3, confidence interval (CI) = 1.8-2.8) and interference (2.8, CI= 2.1-3.4) scales, PHQ-9 (3.2, CI=1.8-4.6), SF-12 PH (6, CI=4-9), and MH (4, CI= 2-7). There were no significant or meaningful improvements in self-efficacy. BPI interference mean change scores were greater among those classified as moderate (3.3, CI=2.4-4.1) and high (3.1, CI=1.5-4.6) prognostic risk as compared to low risk (1.6, CI=-0.3-3.6). BPI intensity change scores were similar across all prognostic groups. Preliminary results suggest that program is associated with improvements in pain intensity, physical and mental health function, and depression. Further analyses are planned to evaluate the implementation of the program and the long-term impact of the program on return to work and reduction of costs associated with LBP.

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B2.3 Agir sur sa santé: an evaluation-informed integrated care framework for the prevention and management of cardio-metabolic chronic diseases in primary care

Presented by **MARIE-FRANCE LANGLOIS** Professor of Medicine, CHUS - Université de Sherbrooke

Until 2014, separate Prevention, Diabetes, Cardiac rehabilitation and Smoking cessation Programs existed in the 7 community health centers (CSSS) of the Eastern Townships. Our objective was to design an integrated framework for the prevention and management of cardio-metabolic chronic diseases (CMCD) in primary care. We evaluated these programs to identify local and regional successes and gaps: medical charts of a random sample of 1118 patients who participated in CMCD programs between 04/2012-04/2013 were audited and satisfaction questionnaires were distributed to patients attending one of the programs and health professionals of all CSSS. A multidisciplinary working group with representatives of professionals and decision-makers from the whole continuum of care piloted the development of the integrated care framework which addresses the prevention and management of the entire CMCD spectrum. They used the expanded chronic care model as a framework, evidence-based best practices, and above mentioned evaluations. Satisfaction of patients was high in general. Health professionals' confidence level to help patient with lifestyle modification is 71%. 16% of the patients participated in more than one program during our reference year and 31% participated in more than one program before and during the reference year (with some duplications of teaching). Delays between referral and the first visit were acceptable 35 days (11-88) except for training in cardiac rehabilitation (152 days (104-233) probably because of closed groups (2-3/year in most CSSS). Only 51% of patients had BMI or waist circumference measurement documented and 38% documented physical activity counselling. Technical quality indicators of monitoring were higher than those involving prescription or target achievement (ex: only 41% of diabetics with A1c<7%). Our integrated framework was designed to address the gaps identified: intervention on all patient risk factors, core lifestyle group teaching, open groups for training in rehabilitation, care protocols for nurses with medical orders to help achieve targets, and support for self-management. This should improve accessibility and quality of care.

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B2.4 Differences and Similarities in Facilitators and Barriers of Chronic Disease Prevention and Management Programs in Two Canadian Provinces in the Context of a Realist Synthesis

Presented by **JUDITH BELLE BROWN** Professor, Université du Québec à Chicoutimi

To describe differences and similarities of barriers and facilitators of Chronic Disease Prevention and Management (CDPM) programs linked to Primary Care (PC) reform in two Canadian provinces (Quebec and Ontario) based on Context-Mechanism-Outcome (CMO) configurations observed in the context of a Realist Synthesis (RS). Many CDPM programs, linked to PC reform, are ongoing in Canada. Interprovincial differences in such programs are often observed within Canadian health care system. Improved knowledge of differences and similarities in mechanisms related to barriers and facilitators of these programs still need to be described. An environmental scan was conducted to identify relevant CDPM programs in Ontario (36) and Quebec (26). Twelve programs were included in the RS based on quality and relevance criteria. The RS strategy comprised: clarifying the scope of the synthesis, searching and appraising the evidence, appraising the quality of the data, extracting, and evaluating the data. More facilitators than barriers were described in both provinces. The RS identified a total of 49 CMO configurations (44 facilitators and 5 barriers), but only 13 of them were observed in both provinces. CMO configurations related to: the chronic care model, self-management, PC reform, patient-centered partnership, patient-centered coordination, and focus on multimorbidity. Four facilitators observed in both provinces in more than six programs were noteworthy: 1) Creation of co-located interdisciplinary teams; 2) Having a shared vision among team members, positive interactions and collaboration; 3) Providing unique individualized care; and 4) Providing educational self-management resources and skills. Differences usually reflected facilitators identified in single programs. In Quebec the majority of the programs focused on self-management whereas in Ontario the programs were directed towards providing coordinated and collaborative patient care. The RS identified facilitators in the two provinces that enhanced CDPM programs. The differences between the two provinces may be a reflection of the content and focus of the provincial programs, in Quebec focusing more on self-management while in Ontario focusing on specific care delivery.

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B3 PRIMARY HEALTHCARE AND ACCESS / SOINS DE SANTÉ PRIMAIRES ET ACCÈS

Fontaine E

B3.1 Access to Primary Health Care and Utilization of Walk In Clinics and Emergency Rooms in Ontario

Presented by **MICHAEL GREEN** Associate Professor, Queen's University

Canada ranks poorly in same or next day access to primary health care (PHC) and has high rates of utilization of emergency rooms (ERs) and walk in clinics. This study examined barriers to accessing PHC and reasons for use of ER and walk in clinics as reported by patients. Data were obtained from the Primary Care Access Survey, a random dial telephone survey of Ontario adult residents between 2006-2010 (N=38,795). Questions included self-reported healthcare utilization, access to, and barriers for, accessing PHC, and reasons for use of ERs and walk in clinics. Data were pooled into calendar years to assess trends over time. A disaggregated analysis for sex differences was included. Differences between patients self-reporting being rostered (formally enrolled) with a family physician (FP) working in a reformed PHC model practice and those who were not aware of being rostered were also assessed. Most (93%) respondents reported having a FP; 15% of patients with a FP reported difficulties making timely appointments when sick. The mean wait time for an appointment when sick was 3.6 days, but 20% of respondents reported waits over a week. About 22% of adults reported using an ER and walk-in clinic in the previous year. Convenience (31%) and lack of availability of their regular FP (41%) were the most common reasons for use of walk in clinics. In contrast, perceived need for ER services due to the type or severity of illness was the most common reason for going the ER (63.5%) followed by lack of availability of FP (16.2%). These statistics did not change meaningfully over the 4-year time period.While access to a regular source of PHC is high, timely access when sick remains a problem. The impact of improving access to PHC on ER utilization is uncertain, as most patients report using the ER for reasons other than difficulty with accessing their usual source of care.

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B3.2 First contact access to family physicians for patients requiring narcotics. Findings from the MAAP-NS: Models and Access Atlas to Primary Care Providers in Nova Scotia Study

Presented by **EMILY GARD MARSHALL** Assistant Professor, Dalhousie University Family Medicine

Objectives: As part of the Models and Access to Primary Care Providers in Nova Scotia (MAAP-NS) study this analysis is the first population study exploring access to care for patients who require narcotics, physician and practice characteristics associated with acceptance of these patients, and their ethical and policy implications. Approach: A 32 item survey was developed to collect provider, practice and access to primary care data for all family physicians and nurse practitioners (here presenting physician-only data) in Nova Scotia. Researchers telephoned each office during regular working hours and conducted the survey with the staff member who answered the phone between October 2013 and June 2014. Provider and practice demographic data (e.g., provider age and gender, size and composition of the practice, acceptance and process for new patients, including whether they would accept a patient requiring narcotics, and availability for patient care) were collected. Results: Responses were collected for 84% (n=589) of eligible family physicians. Few currently accept any new patients (9.2%, n=54); though many (40.4%, n=238) have exceptions (e.g., family members of patients or a "case-by-case" basis). A quarter (25.6%, n=91) of physicians who reported accepting patients unconditionally or by exception declined patients requesting narcotics. Physicians accepting patients requesting narcotics tend to: work in larger practices (p<0.0001); have fewer years in practice (24.3 versus 30.2 years, p<0.0001); provide more hours of patient care (30.6 versus 25.8 hours/week, p=0.0001); and are female (57.4% versus 45.9% male, p<0.001), than physician's not accepting patients who request narcotics. These bivariate trends (including gender) hold in preliminary multivariate logistic regression models, which will be further analyzed in the coming weeks. Conclusion: Access by patients who require narcotics/opiates is limited by practices closed to new patients in general and physicians who specifically exclude them, triggering ethical and legal implications. The findings on provider and practice characteristics related to acceptance of narcotics-requesting patients suggest strategies supporting better access for this vulnerable population.

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B3.3 Expanding after hours primary care services in a disadvantaged region in Australia: Insights for policy and practice

Presented by **GRANT RUSSELL** Head of School of Primary Health Care, Monash University

Like Canada, Australia has ongoing challenges with after-hours (AH) availability of primary care (PC) services. The nation's 61 regional PC organisations (Medicare Locals) are trialling a range of innovations to improve AH health care delivery. This paper evaluates an AH intervention set in one of these Medicare Locals. Our mixed method evaluation was set in the South Eastern Melbourne Medicare Local (SEMML), a socio-demographically disadvantaged region with a population of 800,000. SEMML's AH intervention comprised a) active recruitment of general practices to offer additional services between 6 and 10PM. b) expansion of existing medical deputising services; c) funding for longer opening hours in two semi-rural general practices; and d) an AH general practitioner liaison position in an regional Emergency Department (ED). Evaluation involved key informant interviews, analysis of administrative data on PC capacity and utilisation, and, within the two clinics, analysis of practice, patient and practitioner surveys. Although there was a 35% increase in capacity for AH GP services following the intervention, the increase was confined to metropolitan areas. Nevertheless, within the previously under-serviced semi-rural parts of the catchment, there was a 400% increase in the utilisation of AH deputising services. Over half of deputising visits were provided to patients in residential aged care facilities. One of the two funded semi-rural clinics withdrew from the program, and the other took over 6 months to employ any AH staff. Once AH services commenced, nearly all were for minor non-urgent presentations. Only 6% of patients attending the clinic would have considered seeking care at an ED. Logistic, cultural and organisational barriers prevented implementation of the ED liaison position. SEMML's intervention served as a creative attempt at improving AH PC capacity. While meso–organizations like Medicare Locals have potential in modifying and better coordinating PC delivery, program success depends on how well innovations articulate with the varying needs and/or capabilities of the providers and varied organizations involved in implementation.

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B3.4 Reconciling the downsides of screening: Mothers' experiences with false positive newborn screening results for cystic fibrosis

Presented by **ROBIN HAYEEMS** Scientist-track Investigator; Child Health Evaluative Sciences Member; Assistant Professor, Centre for Genetic Medicine Hospital for Sick Children Research Institute; Institute of Health Policy Management and Evaluation University of Toronto

A downside of population screening is the generation of false positive screening results. We sought to understand how mothers interpret the false positive experience in the context of newborn screening (NBS) for cystic fibrosis (CF). NBS is a longstanding population screening program that enables early identification and treatment of affected infants. In NBS for CF, many infants with false positive results are identified to be carriers of one CF mutation. This may be relevant to parents' future reproductive decisions and is sometimes considered a secondary benefit of NBS. As part of a longitudinal mixed-methods cohort study of NBS for CF, we surveyed mothers of infants with false positive results within 3 months of birth (time-1; T1) and one year later (time-2; T2). Participants who agreed were also interviewed. We present descriptive and qualitative thematic analyses. We report on completed surveys from 134 of 245 mothers (55%) at T1 and 96 of 214 (45%) at T2 as well as 31 T1 interviews. Quantitatively, majorities agreed to feeling informed (T1:95%, T2:86%) and relieved (T1:90%; T2:83%) about their baby's result; and minorities agreed that learning about a false positive (T1:32%; T2:40%) or carrier result (T1:4%; T2:3%) was a disadvantage of NBS. Qualitatively, mothers identified their false positive experience as highly distressing. Tolerance for the distress caused by the false positive experience was expressed in 4 ways – by downplaying the burden in retrospect, appreciating the system of care, identifying benefit for self (reproductive and otherwise), and identifying benefit for others. These findings suggest significant tolerance for false positive NBS results. They also identify ways in which this burden is made tolerable. Notably, reproductive benefit is only one way; systems of care that help to mitigate burdens, and an ethic of care for others, are also important.

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B4 CHRONIC DISEASE MANAGEMENT II / GESTION DES MALADIES CHRONIQUES II Fontaine F

B4.1 Substance-related and addictive disorders among Ontario adults with developmental disabilities: a population-based study

Presented by **ELIZABETH LIN** Research Scientist, Centre for Addiction and Mental Health

The prevalence and correlates of substance-related and addictive disorders (SRAD) in individuals with developmental disabilities (DD) are understudied in both the scientific and policy-related literature. Our objective is to address these gaps using data from the H-CARDD cohort, currently the largest population-based database internationally of adults with DD. Individuals in the H-CARDD database who had an SRAD-related health care contact (n = 4220) were compared with the remaining H-CARDD cohort (n = 62,264) and a 20% sample of all Ontario adults without DD (n = 2,760,670). Analytic variables included age, sex, neighbourhood SES, and several chronic illnesses (e.g., COPD, diabetes) as well as their use of physician services and their use and reuse of ED and inpatient services. The prevalence of SRAD in Ontario adults with DD is 6.4%, a figure more than twice as high as previous reports for individuals with DD (0.05-2.5%) and also higher than those found for Ontario adults without DD (3.5%) and the Canadian general population (4.5%). Presence of SRAD was associated with a higher male/female ratio, living in the poorest neighbourhoods, and higher rates of chronic illnesses, particularly respiratory disorders. Further, 78% of these individuals also had a concurrent psychiatric disorder. Compared to all other groups, adults with the combination of SRAD and psychiatric illness had the highest rates of all-cause ED visits and hospitalizations, as well as all-cause repeat ED visits and repeat hospitalizations despite a high rate (nearly 90%) of accessing outpatient physician care. The previous lack of attention to SRAD reflects the perception that individuals with DD do not access drugs and alcohol. Our findings contradict this perception: SRAD is an important concern for adults with DD in terms of their social determinants of health, risk of comorbidities, and use of health services.

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B4.2 Impact of Transition from Pediatric to Adult Care on Health Services Utilization in Patients with Inflammatory Bowel Disease (IBD): A Population-Based Study

Presented by **XINBEI ZHAO** Graduate Student, Department of Epidemiology and Community Medicine, University of Ottawa

Inflammatory bowel disease (IBD) is a chronic condition with increasing pediatric incidence. Transition from pediatric to adult care may be associated with disruption in specialist care. This study explored the impact of the transfer from pediatric to adult care on health service utilization for pediatric-onset IBD patients. A population-based retrospective cohort study identified all children diagnosed with IBD 1994-2008 and treated by pediatric gastroenterologists from within Ontario health administrative data. Self-controlled case series analyses compared health services utilization in the 2 years before and after transfer to adult gastroenterologists, with a 6 month wash-out period at transfer. Outcome evaluated included IBD related/specific hospitalization, emergency department (ED) utilization, outpatient visits, and laboratory utilization. Incidence rate ratio (IRR) in the post-transfer was compared to pre-transfer periods using Poisson regression analysis (adjusted for sex and income quintile). Analyses were stratified by IBD type: Crohn's disease (CD) and ulcerative colitis (UC). 718 patients were included in the study (481 CD, 208 UC, 29 IBD type unclassifiable). ED utilization was higher after transfer for both CD (IRR 1.65, 95%CI 1.40-1.94) and UC (IRR 2.39, 95%CI 1.87-3.05). Hospitalization rates increased post-transfer (CD: IRR 1.98, 95%CI 1.13–3.45; UC: IRR 1.93, 95%CI 1.42–2.63), as were outpatient visit rates (CD: IRR 1.05, 95%CI 1.04–1.06; UC: IRR 1.07, 95%CI 1.04–1.11), and lab utilization (CD: IRR 1.07, 95%CI 1.06-1.09; UC: IRR 1.09, 95%CI 1.06–1.11). Sensitivity analysis revealed similar results when only the first year post-transfer period was assessed. In the largest study to date examining the transfer from pediatric to adult IBD care, health services utilization increased significantly in the two years after transfer. Understanding causation and rigorously evaluated transition programs may decrease the cost of caring for patients with IBD.

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B4.3 Integration of Cancer Care in the Management of Complex Patients

Presented by **WALTER WODCHIS** Senior Business Analyst, Cancer Care Ontario

This project was intended to define and quantify complexity among patients with cancer, in order to identify opportunities for improved integrated care between the cancer system and other care providers. With patient complexity defined through health system utilization, we sought to describe the trajectories of cancer care in Ontario. A retrospective study of 88,749 adults, newly diagnosed with cancer between 2009 and 2010 was conducted using Ontario administrative data. Resource intensity as defined by the cost of total healthcare use per year was used as a proxy for patient complexity and categorized as either 'low' or 'high' depending on the percentile of total healthcare costs. Patients were grouped into care trajectories based on: complexity before and after treatment, and whether they survived or died following/during treatment. Clinical characteristics including cancer site and stage, multimorbidity, and health system utilization measures were compared across trajectories. Five of the care trajectories were examined in detail and represented 70% of the cohort. The complexity analysis showed that while one third of the cohort died during or following their treatment and one third completed their treatment as low users of the system, another third of these patients exited the cancer system as high users. Patients with high post-treatment complexity or who died during cancer treatment generally tended to be older, have higher severity of cancer staging, have a greater number of comorbid chronic conditions, a greater number of physician visits per month and number of unique specialists in their circle of care as well as a larger proportion of patients who were emergency department users. Provincially there has been a particular focus on improving the care of high cost patients. A significant proportion of cancer patients are defined as high users of the healthcare system and thus require an integrated approach between primary care and cancer specialists, particularly among patients that are more complex.

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B4.4 Post-discharge physician visits and readmission rates in patients with schizophrenia

Presented by **PAUL KURDYAK** Director, Health Outcomes and Performance Evaluation Research Unit, Centre for Addiction and Mental Health

Schizophrenia patients have very high rates of early readmission after being discharged from a psychiatric inpatient unit. Whether timely physician follow-up care following discharge reduces early readmission for schizophrenia patients is unknown. We assessed the impact of physician follow-up visits within 30 days of discharge, on readmission rates over the subsequent six months (i.e. between 31 and 210 days post-discharge) among schizophrenia patients. We conducted a population-based cohort study of patients with a diagnosis of schizophrenia discharged from a psychiatric inpatient unit between 2006 and 2011 in Ontario, Canada. We included patients who were discharged from a psychiatric hospitalization with a diagnosis of schizophrenia. Patients were classified into one of four groups based on the follow-up they received within 30 days of discharge: no follow-up (referent group) or follow-up by: a primary care physician (PCP) only; a psychiatrist only; and both a PCP and a psychiatrist. The main outcome measure was psychiatric readmission between 31 and 210 days post-discharge. Relative rates (aRR) were adjusted for age, sex, neighbourhood income quintile, number of previous psychiatric hospitalizations and ED visits, severity of psychiatric symptoms, and level of psychosocial functioning at hospital discharge. There were 19,244 unique patients discharged with a diagnosis of schizophrenia during the study period. Among the 6,706 (34.8%) with no physician visit within 30 days post-discharge, 1,711 (25.5%) were readmitted in the subsequent six months. Readmission rates were lower among those who had a physician visit by a PCP only (22.2%; aRR 0.88, 95% confidence interval (CI): [0.81-0.96]), a psychiatrist only (21.6%; aRR 0.84, [0.77- 0.90]), and both a PCP and a psychiatrist (21.3%; aRR 0.82, [0.75- 0.90]). Schizophrenia patients are at high risk of early readmission after discharge from a psychiatric hospitalization. Yet, more than 1 in 3 patients with schizophrenia was not seen by a physician within 30 days of discharge. Timely follow-up by a PCP or a psychiatrist modestly reduces early readmissions and improve outcomes in this high-risk group.

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B5 ACCESS & EQUITY AND PRIMARY HEALTHCARE / ACCÈS, ÉQUITÉ ET SOINS DE SANTÉ PRIMAIRES

Fontaine G

B5.1 Favoring timely and appropriate patient evaluation and management in specialized care through effective triage and prioritization

Presented by **MARIE BEAUSEJOUR** Post-Doctoral Fellow, Université de Sherbrooke

Timeliness and appropriateness of referral to specialized care were often reported as suboptimal. With the goal of improving service delivery at the interface between primary and specialized care, many local initiatives for patient triage and prioritization have been proposed. The objective of this study was to review the evidence about effectiveness and successful implementation of such interventions. A systematic literature search and a thorough review of empirical studies evaluating triage and prioritization strategies were independently done by two researchers. Three specific questions were answered: Are these interventions effective? What are the key components of such interventions? What are the factors influencing implementation of these interventions? Comparative and observational studies published between 1998 and 2013, reporting on triage and prioritization interventions for elective care, in diverse populations (age, diagnosis and setting), and evaluating various types of outputs and outcomes (benefits for patients, professionals, organization and system) were considered for review. Thirty-five effectiveness studies and 5 case studies were selected from Medline database. Interventions were effective for the reduction of delays (40% reduction in average), both for first visit and treatment initiation, especially in urgent and PI priority patient groups. The appropriateness of referrals was clearly improved and the volume of services delivery was also increased. Even if very few studies reported on patients' health outcomes, triage and prioritization interventions were implemented while maintaining patients' and professionals' satisfaction. Eight intervention characteristics related to structures, tools and resources were identified as key components for future intervention planning. At the organizational level, physician involvement on both sides of the primary/specialized care interface and leadership were reported as success factors. Factors at the contextual level included consensual clinical guidelines. Triage and prioritization strategies were demonstrated to have a positive impact on specialized service delivery that favors timely and appropriate evaluation and management for patients. The building of strong interprofessional collaboration, consensual criteria, and communication channels may facilitate the successful implementation of such interventions.

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B5.2 Are home visiting programs for at-risk children effective at reducing population level health and social disparities? A PATHS Equity for Children project

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

The objective of this study is to determine the effectiveness of a home visiting program for at-risk families in decreasing inequities in rates of immunization and of children being taken into care between socioeconomic groups in urban settings in Manitoba. Home visiting program data were linked to de-identified administrative data housed at the Manitoba Centre for Health Policy (MCHP). Depending on the indicator, 1,548-2,048 program and 2,609-3,676 comparison children were included. Propensity scores and inverse probability of treatment weights were used to address the selection bias inherent in delivering a voluntary program. Using risk ratios (RR) and risk differences (RD), we measured the gap between children living in the highest income areas and each group of at-risk children (program and comparison). We then tested whether for differences in these gaps. Concentrations curves and indices will further measure gaps. Statistically significant differences were found between the RRs and RDs by program group for immunizations of one year olds (RR – program: 0.90, comparison: 0.87; RD – program: -0.08, comparison: -0.11) and two year olds (RR – program: 0.79, comparison: 0.72; RD – program: -0.14, comparison: -0.19). Differences were also found between program groups for being taken into care for one-year olds (RR – program: 16.1, comparison: 19.9; RD – program: 0.09, comparison: 0.11) and two year olds (RR – program: 19.7, comparison: 23.2; RD – program: 0.13, comparison: 0.15). Concentration curves will also be presented to determine if these results are consistent across methods for measuring disparity in a population. Gaps in immunization and being taken into care rates were significantly narrower for children who had received home visiting services than those who had not. These findings suggest that the home visiting program as implemented in Manitoba narrow the gap between at-risk children and children living in the wealthiest areas.

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B5.3 Improving access to primary health care for vulnerable populations: A typology of components of organizational interventions to inform decision-making

Presented by **JEANNIE HAGGERTY** Associate Professor, McGill University

1) To present a typology of organizational interventions improving access to primary health care (PHC) for vulnerable populations 2) To show how this typology is used by six groups of health professionals, administrators, researchers, decision-makers and patients in designing an intervention to meet local access needs. As part of the IMPACT research program, we conducted a scoping review of the published literature and an environmental scan (using an online survey) to identify organisational interventions aiming to improve access to PHC for vulnerable populations. An inductive analysis approach was used in both studies to identify components of access-related interventions, which were then classified using a theoretical model of dimensions of access to PHC (Levesque 2013). This typology was shared with the groups of PHC stakeholders, three in Canada and three in Australia, each mandated to design, implement and evaluate an innovative intervention addressing local access priorities. A total of 105 articles were included from the scoping review and the environmental scan identified 251 unique interventions from 20 countries. The inductive analysis resulted in the identification of 48 components of organizational interventions. Studies and environmental scan entries described complex interventions generally made up of various components combined in different ways. Interventions were usually comprised of components from more than one dimension of access to PHC. The typology was shared and discussed with the groups of PHC stakeholders in a range of formats: handouts, presentations, discussions and databases. Contents of the typology were discussed in small group-discussions, during brainstorming sessions and at deliberative forums. The groups used the contents of the typology to varying degrees in designing their access-related interventions. Our results provide an understanding of the breadth of current innovative interventions improving access to PHC for vulnerable populations as well as an illustration of how such results can be shared, discussed and used by PHC stakeholders in designing an intervention tailored to their local access priorities.

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B5.4 Progress in closing the Gap in British Columbia

Presented by **JOSÉE G LAVOIE** Associate Professor, University of Manitoba

This study documented trends in rates of hospitalization for Ambulatory Care Sensitive Conditions (ACSC – i.e. hospital separation, length of stay, rates of readmission) among First Nations living on- and off-reserve in comparison to their British Columbia non-First Nation counterparts, to assess the performance of existing primary healthcare services (PHC). We developed a multi-level model that predicts hospitalization for ACSC over time (1994 to 2010) for each resident of First Nations and rural and remote communities on the basis of community and individual-level characteristics. We aggregated the results by community to derive predicted rates of hospitalization episodes, and length of stay. The project sample included all BC residents eligible under the Medical Services Plan living on First Nations reserves (n=51,000 in 2010). This study was conducted in partnership with the First Nations Health Authority. The rate of hospital separation and length of stay have been dropping for First Nations living on-reserve since 1994, reflecting a potential improvement in health status, as well as a shift in discharge policies. Although the gap is closing, we note that, compared to other BC residents, the length of stay per admission is shorter for First Nations living on-reserve, the rate of readmission is lower, and the rate of admission ending in death has been steadily growing since 2001. Finally, we note that the average age at the time of admission is lower for First Nations living on-reserve compared to First Nations living off-reserve, rural residents and urban residents. This is true for all conditions examined. Our results raise serious concerns about access to comprehensive and responsive PHC for First Nations living on-reserve from 1994 to 2010. Our data can be used to inform service priority-setting for BC First Nations, and validates the need for the recent transfer of services and decision-making to the FNHA.

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B6 HEALTH ECONOMICS / ÉCONOMIE DE LA SANTÉ

Fontaine H

B6.1 Is the National Surgical Quality Improvement Program Cost-effective: A Systematic Review

Presented by **KEDNAPA THAVORN** Scientist, Ottawa Hospital Research Institute

Postoperative adverse events increase hospitalisation length of stay and healthcare costs. This study systematically summarizes the effectiveness and the cost-effectiveness of the National Surgical Quality Improvement Program (NSQIP), an intervention for measuring and reporting surgical outcomes, on the risk of hospital-acquired infection (HAI). We included all studies assessing the effectiveness or the cost-effectiveness of NSQIP compared to usual care or no intervention in all patients who are admitted for elective operations. We searched the following electronic databases from inception to August 31, 2014 using medical subject headings and text words related to HAI and NSQIP: MEDLINE, EMBASE, Cochrane Database of Systematic Reviews, and EconLit. We also searched for grey literature from abstracts/proceedings from conferences, reference lists. Studies are screened, abstracted, and assessed independently by two reviewers. Any conflicts were resolved through team discussion. The methodological quality of included studies was appraised. The outcomes of interest were the proportion of patients experiencing HAIs and an incremental cost-effectiveness ratio. The search strategy generated 916 references. Of these, only two articles reporting the cost-effectiveness of NSQIP. The first study assessed the cost-effectiveness of implementing NSQIP in one academic center in the US and showed that NSQIP was cost-effective from the payer perspective, with incremental cost-effectiveness ratios of $25,471 and $7319 per event avoided for the first and second years of implementation, respectively. The second study estimated the value for money of implementing NSQIP in British Columbia and demonstrated that NSQIP implementation led to cost savings because the program saved patient days and improved access to surgical procedures. The study also reported that a reduction in these negative outcomes due to NSQIP could reduce 15,545 patient days across the province in one year. Postoperative adverse events occur too commonly and contribute greatly to our increasing healthcare costs. NSQIP appears to be a cost-effective intervention for improving the safety of surgical care. This presentation will also discuss the effectiveness of NSQIP in reducing risk of HAIs and the methodological quality of included cost-effectiveness studies.

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B6.2 The Interpretation of Health Care Need Among the General Public: An Empirical Investigation using a Discrete-Choice Approach

Presented by **JEREMIAH HURLEY** Professor, McMaster University

The purpose of this study is to investigate empirically how the public interprets the concept of health care need, and specifically to test support among the general public for each of three commonly cited definitions of need: need as a person's baseline health status; need as a person's ability-to-benefit (ATB); and need as the amount of resources required to exhaust a person's ability-to-benefit (RREB). This study uses a discrete-choice experiment, supplemented with qualitative data derived from written responses to open-ended survey questions and from de-briefing interviews conducted with a sample of participants. Quantitative analysis of DCE responses uses a rank-order, latent-class discrete-choice model; analysis of the qualitative data uses descriptive and interpretive thematic coding of written and verbal responses. The most consistent finding is that among members of the public baseline health is the dominant factor for determining need. In contrast, the relationship between need and each of ATB and RREB varied among participants. One pattern emphasized the idea of compensation when judging need individuals with lesser ATB from care were judged to be in greater need than individuals with greater ATB. A second pattern emphasized the idea of efficiency when judging need, so that those who required fewer pills to achieve a given health benefit were judged to be in greater need. The written comments and the interview data confirmed that subjects understood the DCE scenarios and questions, and that the unexpected patterns of need judgments were deliberate and reasoned responses. The findings imply both a more complex, composite understanding of need among the public than suggested by any single definition found in the literature, and that processes for eliciting the views of the public to inform resource allocation should avoid using general phrases or principles, such as ``allocation according to need," which the public may interpret quite differently than health analysts.

Co-Author(s): Emmanouil Mentzakis, University of Southhampton / Michel Grignon, McMaster University

B6.3 Canadians' polarized constructs of need: Qualitative analysis of responses to a population-based discrete-choice experiment

Presented by **DEIRDRE DEJEAN** Professor, McMaster University

Our objective in this study was to understand how Canadians identify and rationalize "the neediest individual" when they are given quantitative information about individuals' relative baseline health, ability to benefit, and health care resources required to exhaust benefit. This was the qualitative component of a mixed-methods discrete choice experiment (DCE) study. The DCE survey was administered on a Canada-wide community-based sample (n = 349). The qualitative component was conducted on subset of individuals from Hamilton. We qualitatively analyzed 291 text responses made by (n=53) survey participants, and conducted in-depth debriefing interviews with 22 participants. We coded all text and transcripts descriptively (e.g., for choices and stated reasons) as well as interpretively (e.g., for unconventional reasoning, values expressed, etc.). Data were analyzed for characteristic patterns of reasoning and choices in the experiment, as well as any external considerations respondents raised. Respondents understood the DCE, and made carefully reasoned choices. They used a range of approaches to identify individuals in "greatest need". Respondents polarized between two characterizations of need: need as representing the most tractable vs. least tractable cases. That is, given the constraint of limited resources, one segment of the sample argued that those whose health can be improved upon relatively easily, efficiently, or inexpensively are those most in need. Conversely, the other segment argued that the neediest are those whose health is more difficult, inefficient or expensive to improve. The two characterizations draw upon fundamentally different values and ways of thinking about need. Respondents sometimes embellished the experimental scenarios with imagined factors to help determine need and make difficult choices. Lay people in Canada seem divided between two essential, conflicting, meanings of "need" for scarce resources. Each has directly opposing implications for technical efficiency, triage ethics, and so forth. Some people resist reductive choices, and strive to consider more factors than baseline health, ability to benefit, and resources required.

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B6.4 Cost-Utility Analysis of Robotic-Assisted versus Open Radical Prostatectomy in Patients with Clinically Localized Prostate Cancer in Ontario

Presented by **XUANQIAN XIE** Health Economist, Toronto Health Economics and Technology Assessment Collaborative, Leslie Dan Pharmacy, University of Toronto

To assess the cost-effectiveness (i.e. incremental cost per QALY gained) of robotic-assisted radical prostatectomy (RARP) versus open radical prostatectomy (RP) in patients with clinically localized prostate cancer in Ontario. The analysis was conducted from the perspective of the Ontario Ministry of Health and Long-Term Care. We identified patients who received RP in Ontario since 2004 using the Prostate Centre Database at University Health Network and the Institute for Clinical Evaluative Science (ICES) databases. The SAS macro developed by the ICES was used to estimate the healthcare cost. We also included in the analysis, the costs of purchasing and servicing the da Vinci Surgical System® and its disposables. We used mixed models and propensity scores matching approach to compare QALYs and cumulative costs between the two treatments in 1-year follow-up. One da Vinci Surgical System® costs about $5,310,411 (Canadian Dollar). We estimated the cost of using this system at about $11,651 per procedure. The total annual cost for RARP and open RP was estimated at $28,262 and $16,732, respectively. Compared with open RP, RARP was associated with higher physician fee per procedure ($3,163 versus $2,384), although the costs were lower for post-discharge follow-up ($4,915 versus $6,077). The difference in change in utility at 1 year (relative to baseline) between the two groups was small (±0.002). Predicted QALYs at year were slightly higher for RARP than for open RP (0.943 versus 0.942). The corresponding incremental cost-effectiveness ratio (ICER) was $10.8 million per QALY gained. ICER remained high even after performing sensitivity analysis with scenarios favoring RARP. Using conventional methods, observed health benefits for RARP are low, and there are significant marginal costs. Thus, RARP does not appear to be cost effective. Expanding access to minimally invasive surgery and clinician preference are factors that are not incorporated in our analysis.

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B7 PANEL / PRÉSENTATION EN PANEL

Mont Royal

B7 Improving care for older adults and individuals with dementia in the French and Canadian health care systems: insights and challenges in evaluating policy interventions

Améliorer les soins dispensés aux personnes âgées et aux personnes atteintes de démence dans les systèmes de soins de santé canadiens et français : perspectives et défis en matière d'évaluation des politiques

Moderated by **ERIN STRUMPF**, McGill University

Presented by **MICHEL GRIGNON**, McMaster University; **YANN BOURGUEIL**, L'Institut de recherche et documentation en économie de la santé; **HOWARD BERGMAN**, McGill University; **ISABELLE VEDEL**, McGill University

Internationally, clinicians and policymakers alike are interested in developing capacity to meet the needs of older adults and individuals with Alzheimer's and related disorders. Effective action requires quantifying the magnitude of the challenge, developing effective interventions, and evaluating their implementation. Dr. Grignon will discuss estimates of the prevalence and cost of dementia across Canadian jurisdictions and internationally. Dr. Bourgueil will present the evaluation of a policy experiment underway in 9 pilot regions in France to improve pathways of care for the elderly (PAERPA). Dr. Bergman and Dr. Vedel will present an evaluation of Collaborative Care Models implemented in primary care teams in Ontario and Quebec to improve care for older persons with Alzheimer's disease and related disorders. Research approaches, data access and financing, and interactions with decision makers and health professionals will be compared and contrasted across these projects and jurisdictions.

C1 AGING / VIEILLISSEMENT Fontaine C

C1.1 Distribution and Utilization of Palliative Care Across Ontario's Health Care Settings: A Retrospective

Presented by **PETER TANUSEPUTRO** Research Fellow, Bruyère Research Institute

The objective of this research study was to use health administrative databases to understand the distribution and utilization of palliative care across Ontario's health care settings and in particular within the continuing care sector (home care, long-term care, rehabilitation, and complex continuing care). All deaths occurring in the Registered Persons Database between April 1, 2010 and March 31, 2012 for Ontario were captured. For each decedent, we retrospectively examined the provision of palliative and non-palliative health care services 3, 6, and 12 months prior to death using administrative data from the Institute of Clinical and Evaluative Sciences (ICES). Analysis included examination of health care utilization and costs of decedents receiving and not receiving palliative care across health sectors. Regional differences and socio-demographic characteristics were also examined. About 60% of decedents used home care in their last year of life and 25% used long-term care. Among 92,276 decedents receiving palliative care (52% of all decedents), an average of 35 days of palliative care was delivered in the last year of life. A significant proportion received care for less than 7 days, and had care initiated less than 7 days prior to death. Home care and inpatient acute care contributed the largest number of palliative care days delivered (44.2% and 37.5%, respectively). Total health care cost among those receiving palliative care was higher than those who did not; this can largely be explained by palliative care being captured using claims of health care use, which is in turn what contributes to total costs. This study helps to unpack palliative care delivery and utilization across Ontario's health sectors. The findings of this study will allow policy makers to better understand the state of palliative care delivery in Ontario and to inform ongoing policy initiatives aiming to improve care at the end of life.

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C1.2 Values Talk about Patient Care Transition Policy: what values are informing the policy discourse?

Presented by **KIMIA SOROURI** Student Researcher, McMaster University

Patient care transitions are a prominent area of health policy development in Canada. Health policy is value-laden, but these values are largely implicit. In this presentation, we will elucidate the values informing current policy discourse on patient care transitions and how values-based tensions are addressed. We analyzed 16 health policy documents published in Ontario during the five-year period 2007-2012. The documents were selected to reflect a range of health sector perspectives, including patient groups, think tanks, professional associations, and government reports addressing policy analysis and recommendations regarding patient care transitions. Our analysis involved both a descriptive analysis of values language within and across policy documents and an ethical analysis of emerging values-based tensions, including how such tensions were addressed within the document. Values such as efficiency, quality of care, patient-centred, equity, accessibility, accountability, and transparency were commonly identified in the documents. However, for the most part, these values were not defined and were not used consistently across the documents. Efficiency and quality of care were often presented together as important policy goals. However, in some policy documents, these were presented as complementary and mutually supporting; in others, they were presented as trade-offs. The importance of an integrated health system was underscored in all policy documents. However, the goals of integration and the means of achieving them varied across the documents. Our analysis demonstrated that although there is alignment in what values were relevant to talking about patient care transitions, there was less alignment in how these values were defined and how they informed meaningfully the development of policies to improve patient care transitions. Clarity about these underlying values will be important for developing policies regarding patient care transitions that are not only practicable but also coherent from a values perspective.

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C1.3 L'intervention d'autonomisation des personnes en perte d'autonomie liée au vieillissement

Presented by **ANNIE TESSIER** professionnelle scientifique, Institut national d'excellence en santé et en services sociaux

L'essor de la population âgée et l'augmentation des besoins en services de longue durée sont des préoccupations mondiales. Certains pays y ont répondu en adoptant une intervention favorisant l'autonomie. Cette étude examine la pertinence d'ajouter l'intervention d'autonomisation aux autres services de soutien à domicile déjà en place au Québec. Une revue systématique a été réalisée pour déterminer l'efficacité de l'intervention. Plusieurs bases de données dont MEDLINE, CINAHL et PsycINFO ont été interrogées. La recherche a porté sur les articles publiés en français ou en anglais (2001 à 2014). La sélection et l'évaluation de la qualité méthodologique des études ont été réalisées par deux professionnels. Diverses parties prenantes ont été consultées quant à la pertinence de l'implantation de l'autonomisation au Québec. Vingt et un experts ont participé à des comités. Cent vingt-cinq intervenants ont répondu à un sondage en ligne et vingt usagers ont été rencontrés en groupe de discussion. Les résultats des 20 études recensées suggèrent que l'intervention a un effet sur les capacités fonctionnelles à court et moyen terme, sans être supérieur aux services traditionnels de soutien à domicile. L'autonomisation semble améliorer davantage la qualité de vie liée à la santé des usagers que les services traditionnels et elle a un effet positif sur l'utilisation des services, particulièrement à court terme. Malgré les coûts initiaux, l'autonomisation est potentiellement rentable. Dans les dix dernières années, plusieurs pays ont adopté cette intervention, obtenant des résultats positifs. Un examen de leurs expériences a permis d'identifier les caractéristiques clés de l'autonomisation et les facteurs de succès de son implantation. Les parties prenantes consultées se sont montrées enthousiastes, mais prudentes face à l'éventualité d'implanter l'autonomisation au Québec. Considérant les données probantes, l'équilibre entre les avantages et les inconvénients, les valeurs et les préférences des parties prenantes et l'impact potentiel sur les ressources, l'introduction de l'autonomisation qui complèterait les autres services à domicile déjà en place au Québec est pertinente. L'implantation pourrait commencer par un projet de démonstration.

C1.4 Burden of treatable symptoms at end of life in nursing home residents: Relation to modifiable features of work environment

Presented by **MATTHIAS HOBEN** Alberta Innovates Health Solutions Post-Doctoral Fellow, University of Alberta

1. To describe trajectories of burdensome symptoms in nursing home residents in the last year of life 2. To develop a rating of burdensome symptoms and of questionable practices at end of life 3. To develop, in partnership with stakeholders, a set of recommendations for action Trajectories of six symptoms (dyspnoea, pain, pressure ulcers, urinary tract infections, challenging behavior, delirium) 2008 – 2012 were assessed using longitudinal resident data (RAI-MDS 2.0). Modifiable organizational context was assessed using the Alberta Context Tool©. Participants included 2635 residents with dementia, 1012 without dementia. Context scores were obtained from 1381 front line care staff in a stratified random sample of 36 nursing homes in Alberta, Manitoba, and Saskatchewan. All residents received assessments in each quarter of the year before death. We used hierarchical mixed model, repeated measures regression, to simultaneously evaluate effects of time, dementia, and context on symptom trajectories. In the last quarter before death, the most frequent symptoms were challenging behavior (dementia) and delirium (non-dementia). In both groups the least frequent symptom was urinary tract infections. Except for challenging behaviour, the prevalence of all symptoms for residents with or without dementia significantly increased as death approached. In facilities with more favorable context, residents experienced significantly fewer of most symptoms. Symptoms (e.g., pain, delirium, aspiration, dry mouth, etc.) were rated for burden by a group of experts and practices (e.g., antipsychotic use without psychosis, physical restraint use, feeding tube use, hospital and emergency department transitions, etc.) were rated for appropriateness. Both, symptoms and practices, were assessed for their prevalence based on our data, and experts rated whether associated costs were high, moderate or low. Symptom burden increases as end of life approaches but differs between high and low context facilities and between residents with and without dementia. These data are being used in Delphi panels with key policy stakeholders to generate priority focus areas for quality improvement in long term care facilities.

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C2 ABORIGINAL (PRIMARY HEALTHCARE & ACCESS AND EQUITY) / AUTOCHTONES (SOINS DE SANTÉ PRIMAIRES & ACCÈS ET ÉQUITÉ)

Fontaine D

C2.1 Negotiation, Reciprocity and Reality: the experience of collaboration in the "Innovation in Community-based Primary Health Care (CBPHC) Supporting Transformation in the Health of First Nation and rural/remote communities in Manitoba (iPHIT)" program of research

Presented by **WANDA PHILLIPS-BECK** Nurse Research Manager, First Nations Health and Social Secretariat of Manitoba

iPHIT is collaboration between University of Manitoba, the AMC and 8 First Nations (FN) in Manitoba. We aim to understand what elements of health/system communities perceive as important; utilize this knowledge to document/build CBPHC models; test these model(s) for effectiveness and ultimately, improve the scope and delivery of CBPHC services. The 5 year project set out to abide by FN ethical guidelines of 1) free prior and informed consent; 2) ownership, control, access and possession of data and 3) respect for FN ethical principles by: joint planning of research project; creating joint Indigenous and University co-lead research teams; engaging & ongoing communication between researchers and community leadership; community support and formation of Local Advisory Committees; establishing a unique role for the Nurse Research Manager; hiring and building skills locally (Local Research Assistants); FN controlled data management; creating sub-research teams and community involvement in data collection, validation, analysis & interpretation. Through the collaboration we have learned the benefits of reciprocal relationships and on-going communication, and these factors are crucial for the success of research project. There is greater awareness of the use and benefits of research in FN communities; communities have begun to take action on what they have learned through the research project; and there is greater willingness from all partners to listen, understand, and utilize respectful approaches in working together. We have also learned that strong leadership is crucial; clear and regular communication is paramount, roles and responsibilities are sometimes fluid, but yet still need to be clearly defined; "community engagement" is not well understood by academia and; most importantly negotiation & reciprocity is absolutely critical for the duration of the project. This presentation will describe the partnership and collaborative approach to the program of research. We will share our experiences and lessons learned; of negotiating and pioneering new research arrangements and the realities of applying the principles self-determination to research.

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C2.2 The Health Status of Canada's First Nations Population: Re-conceptualizing determinants of health

Presented by **ROBERT NESDOLE** Biostatistician/Epidemiologist, Queen's University

Identify critical differences surrounding the key determinants of health articulated by the Public Health Agency of Canada (PHAC) and the cultural knowledge of First Nations people expressed by the Four Worlds International Institute for Human and Community Development (Four-Worlds) and their model of 14 determinants of health and well-being. A First Nations worldview was used to deconstruct, compare and contrast philosophies underpinning the key determinants of health developed by the PHAC and the ontological perspective expressed by the Four-Worlds model of 14 determinants of health and well-being. Multiple sources of academic and grey literature were used to provide context and identify factors contributing to existing health disparity found within First Nations populations. Critical insights gleaned from comparisons between the PHAC's determinants of health and the Four-Worlds model were then developed to inform public health services for Canada's First Nations population. Comparing the Four-Worlds 14 determinants of health with the PHAC's key determinants of health reveals subtle yet important differences in philosophies. First Nations philosophy is grounded in the human context interconnected and interdependent with the natural world, integral to First Nations identity and health. In contrast, the key determinants of health model focuses on the interaction of the human and the environment; leaving out the importance of life based on stewardship of the land and harmony with the earth. Examination of the philosophical divergence between the PHAC's key determinants of health and the worldview embedded in the Four-Worlds determinants of health and well-being model highlights factors including colonization, racism, marginalization and underfunding of First Nations programs, contributing to health inequities experienced by First Nations people. Public health programs in Canada may inadvertently marginalize and fail to meet the needs of First Nations people due to differing underlying philosophies. Incorporating the Four-Worlds model within the context of public health services may facilitate a deeper understanding of social determinants of health of First Nations populations.

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C2.3 Aboriginal Health Policy-An Analysis of Ontario's Aboriginal Healing and Wellness Strategy, 20 Years Later

Presented by **CHRISTINA HACKETT** PhD Student, McMaster University

Significant health disparities exist between Aboriginal and non-Aboriginal Canadians. Ontario's Aboriginal Healing and Wellness Strategy (AHWS) marks the first provincial Aboriginal-specific health policy in Canada. This presentation provides an explanatory analysis of AHWS's development process, highlighting strategies for development of Aboriginal-specific health policy across provinces currently void of these policies. Ontario's AHWS was chosen for analysis as it was the first Aboriginal-specific health policy implemented at the provincial level. Using John Kingdon's multiple streams framework, events catalyzing the AHWS's development in Ontario from 1982 to 1997 are analyzed. Academic and grey literature, and a media scan were used to identify focusing events and public sentiment towards issues that created a policy window, which shaped the AHWS's development. A policy legacy framework was used to provide an overview of the historical, institutional factors that preceded the AHWS, at the federal and provincial levels. The AHWS, along with the subsequent establishment of the First Nations Health Authority (FNHA) in BC indicate the presence of a new policy path in Aboriginal health policy. Factors that facilitated the ability to create the AHWS in Ontario were: A sympathetic political climate across provincial government ministries. Aligning Aboriginal health issues with issues holding prominence in the general public as well as in political arenas. Formalization of the inherent Aboriginal right to self-government and healthcare service ownership by the provincial government. A process of true consensus reflecting epistemological compromise and understanding between Aboriginal and non-Aboriginal ways of knowing and communicating. The anticipation and navigation of potential political factors that would impede policy implementation. These conditions can inform strategies for improving Aboriginal health outcomes. Awareness of potentially sympathetic political climates along with the precedents of the AHWS in ON, and now the FNHA in BC, can inform strategies for discovering and mobilizing around future windows of opportunity for Aboriginal health policy. Without Aboriginal health policy implemented at the provincial level, at which operational decisions about healthcare delivery are made, systemic barriers remain for equitable access to healthcare for Aboriginal populations.

C2.4 First Nations and the Health Service Divide Beyond Medicare: Provincial and Federal Coverage for the Diagnosis and Treatment of Sleep Apnea

Presented by **GREGORY MARCHILDON** Canada Research Chair and Professor, Johnson-Shoyama Graduate School of Public Policy, University of Regina

Within provinces, coverage for all non-medicare services is bifurcated, with one regime for eligible First Nations and another for all other provincial residents. This health service divide and its implications are examined in depth through a case study of diagnostic and treatment services for sleep apnea in Saskatchewan. In 2014, based upon an extensive secondary and grey literature review, the researchers prepared and conducted detailed key informant interviews as follows: Health Canada administrators and service providers (3) of First Nation health services in Saskatchewan for sleep apnea treatment and diagnostic services covered under the non-insured health benefits (NIHB) program; Provincial program administrators (4) of an extended health benefits program covering some sleep apnea services known as Saskatchewan Aids for Independent Living (SAIL); and Physicians (3) providing sleep apnea services in Saskatchewan to provincial residents with and without registered Indian status. The results demonstrate the major differences in coverage for diagnostic and treatment protocols as well as service coverage and timeliness, with some negative results for the registered Indian portion of the provincial population. This case study also illustrates the ways in which services for defined populations such as registered Indians can be excluded from provincial coverage for medicare. Based on this evidence, the researchers propose various policy options that could potentially address the current service divide. By providing a window on non-Canada Health Act services, this case study suggests the need for a review of the differences in coverage for diagnosis and treatment of multiple conditions that can have a major impact on the health of at-risk populations, especially First Nation groups in Canada.

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C3 PRIMARY HEALTHCARE AND NEW MODELS / SOINS DE SANTÉ PRIMAIRES ET NOUVEAUX MODÈLES Fontaine E

C3.1 Do multidisciplinary primary care teams impact health care utilization and costs for patients with multiple chronic conditions? Evidence from Quebec's Family Medicine Groups

Presented by **ERIN STRUMPF** Research Assistant, McGill University and Direction de santé publique de Montréal

Family Medicine Groups (FMGs) aim to enhance access and coordination of care. The roles of nurses in these multidisciplinary teams suggest that benefits of team-based primary care may be concentrated among vulnerable patients. We evaluated the impacts of FMGs on service use and costs among patients with multimorbidity. We built a longitudinal administrative dataset of the population of vulnerable patients in Quebec, characterizing individuals as enrolled in a FMG or not. Given the voluntary nature of FMG enrollment, we adjusted for baseline differences between FMG and non-FMG enrollees using propensity scores based on patients' characteristics 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 on health care utilization and costs for patients with multiple chronic conditions (n=244,274) compared to patients with no comorbidity (n=334,559). Five years of post-enrollment longitudinal data allow an adequate follow-up period to observe changes in the utilization of health services and related costs. Results suggest that the impacts of FMGs vary depending on whether patients have multiple chronic conditions. The FMGs reduced the number of emergency department (ED) visits and the number of hospitalizations for patient without multimorbidity. Among patients with multiple chronic conditions, enrollment in a FMG increased the number of ED visits and hospitalizations over the five years of follow-up. Similarly, FMGs decreased the costs of ED visits and hospitalizations for patients without multimorbidity, but increased those costs for patients with multimorbidity. The FMG's effect on the use of ambulatory services and related costs is similar irrespective of multimorbidity status. FMGs appear more effective at reducing health care utilization and costs among less complex patients than among those with multimorbidity. Reductions in ED and hospital utilization and costs suggest better quality and coordination of care among patients without multimorbidity. Our conclusions are limited by chronic conditions identifiable in administrative databases.

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C3.2 La qualité des soins est-elle meilleure dans les nouveaux modèles de soins pluridisciplinaires au Québec? Une étude du respect des lignes directrices de trois maladies chroniques en groupes de médecine de famille (GMF)

Presented by **MAMADOU DIOP** Agent de recherche, Direction de santé public de Montréal

Nous avons évalué l'effet des groupes pluridisciplinaires en première ligne, en l'absence d'incitatifs financiers liés au paiement à la performance, sur le respect des lignes directrices pour les soins aux patients. Spécifiquement, nous avons mesuré l'effet des GMF sur le respect des recommandations de pratique basées sur des données probantes. Notre étude de cohortes inclut les personnes atteintes d'au moins une des trois maladies chroniques retenues pour lesquelles le respect des lignes directrices était mesurable dans notre banque de données médico administratives : diabète, MPOC ou insuffisance cardiaque. Notre échantillon compte 224 450 patients inscrits comme vulnérables. Des indicateurs de respect des lignes directrices spécifiques à chaque maladie chronique ou décrivant les proportions de cibles atteintes ont été construits. En utilisant un score de propension qui corrige le biais de sélection, nous avons évalué l'effet des GMF sur le respect avec des régressions multivariées et des doubles différences. Aussi bien pour les patients GMF que pour les patients non GMF, les résultats montrent une nette amélioration du respect des lignes directrices après l'inscription comme patient vulnérable auprès d'un médecin traitant. Cependant, nous constatons qu'il n'y a pas d'effet positif décelable des GMF sur le respect des lignes directrices pour les maladies chroniques considérées. Les patients suivis en GMF présentent une moins grande amélioration de l'adhérence aux recommandations de prescriptions de médicaments relativement aux patients inscrits auprès d'un médecin non GMF. Par ailleurs, rien n'indique un effet des GMF sur le respect des lignes directrices en lien avec les consultations, puisque les augmentations surviennent dans les deux groupes de façon semblable. Dans le contexte actuel, les GMF ne semblent pas avoir d'effet spécifique sur le respect des recommandations évaluées. Nous expliquons ce résultat par l'hypothèse que l'inscription auprès d'un omnipraticien est synonyme d'une prise en charge des patients indépendamment du modèle d'organisation.

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C3.3 Factors Associated with Patient Experience in Ontario's Family Health Teams (FHTs)

Presented by **DALE MCMURCHY** President, Dale McMurchy Consulting

In 2008, the Ontario Ministry of Health and Long Term Care funded a 5-year independent evaluation of Family Health Teams (FHTs) to identify their successes and shortcomings. It sought to provide the MOHLTC with an opportunity to assess achievements, support performance improvement, and provide a measure of accountability to stakeholders. A mixed-method approach was applied to examine performance in >100 FHTs. Patient, provider and organizational surveys, as well as site visits and patient focus groups, at baseline and follow up (2009-10 to 2012) were used to examine structural and organizational characteristics, performance, and patient experience. This abstract focuses on structural and organizational characteristics and those found to be most associated with better patient experience. Multilevel regression models using data from all three types of surveys, with patient experience domain scores as outcomes were performed. Qualitative data from 198 staff and 66 patients at 25 FHTs were analysed using Atlas.ti. Several organizational characteristics showed improvement with the greatest advances in planning processes, same-day access, information continuity, and paperless EMRs. At follow-up, only one FHT was top-rated and three were bottom-rated in all domains. Almost half were high performers in some domains and low in others. Patient satisfaction with reception was strongly associated with higher overall patient experience in qualitative and quantitative analyses. Higher patient ratings were also associated with: teamwork; well-articulated/ understood goals; patient access to medical records; more IHPs seen; paperless records; and using patient profiles for planning. Qualitative analyses also showed visionary leadership; HHR policies; working to full scope; regular meetings; e-mail correspondence with patients; systematic approaches to delivering chronic care; external partnerships; and commitment to QI were most associated with better patient experiences. FHTs are not all at the same maturity level, but most evolved over time. Recent improvements are unlikely to affect patient-reported experience yet. Some characteristics associated with better patient experience are consistent with other studies, while others are unique. Focusing on these may accelerate maturation and improve services and outcomes.

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C3.4 Should I Stay or Should I Go? Factors Associated with Family Physicians' Decision to Quit New Primary Care Teams in Quebec

Presented by **MEHDI AMMI** Assistant Professor, Carleton University

Despite great enthusiasm for new inter-professional primary care teams (PCTs) among policy-makers, the evidence concerning their impacts is relatively scarce with respect to the retention of health professionals. This project address this gap in evidence by examining the factors associated with family physicians' decision to quit Quebec's primary care teams (Family Medicine Groups – FMGs). We rely on an administrative database constructed specifically to evaluate the effects of FMGs. The database contains information on about 5,000 FMG and non-FMG general practitioners (GPs) from 2000-2010 across the entire province of Quebec. Among the 906 FMG physicians, about 15% quit these organizations after five years of follow-up. We first consider the different cross-sections (i.e., each of the 5 years of follow-up) independently and use multivariate logistic regressions for the decision to quit FMG (binary outcome: quitting or staying). We then take advantage of the longitudinal nature of our dataset and use fixed effect logistic regressions with panel robust standard errors. The characteristics associated with the decision to quit that we consider include physician demographics, physician practice location, the quantity and quality of their activity, and the characteristics of their patient' roster. Preliminary results from cross-sectional analysis show that among demographics, only experience consistently appears as a determinant: younger GPs quit more than their more senior colleagues. A higher share of vulnerable patients (i.e., elderly or chronically ill) reduce the probability of quitting FMG. Having a higher share of the practice in private setting reduce quitting, while a higher share of the activity in emergency room increase dropout from FMGs. Our preliminary results also show that physicians who quit FMGs see less patients and do less visits than those who remain in FMGs. It is not clear however that these results are a direct consequence of FMG participation. Further analysis will be made to estimate more comprehensive longitudinal models. Policy and research attention is currently focused on the recruitment in and the expansion of PCTs. It is however important to make sure GPs do not leave these structures. A better understanding of the factors associated with the quitting decision will help policy-makers to develop strategies to improve retention in these new structures.

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C4 QUALITY, SAFETY & PERFORMANCE MEASUREMENT AND PRIMARY CARE / QUALITÉ, SÉCURITÉ ET MESURE DU RENDEMENT ET SOINS PRIMAIRES

Fontaine F

C4.1 Estimating organ donor potential: a comparable tool to track performance, identify gaps and help save lives

Presented by **CHRISTINA LAWAND** Senior Researcher, Canadian Institute for Health Information

Organ donation saves lives, but in Canada, there is a shortage of available organs for transplant. The purpose of this study is to estimate how many people who die in Canadian hospitals are clinically eligible to become organ donors and how effectively health systems across the country convert potential donors into actual donors. Administrative data on more than 100,000 hospital deaths a year in Canada were used for this study. The two main data sources for analysis were CIHI's Hospital Morbidity Database (HMDB) and the Canadian Organ Replacement Register (CORR). Donor potential was estimated by identifying patients who died in acute care hospitals from severe brain injury (or other conditions associated with donation), who were mechanically ventilated, and who had no medical contraindications. While there are data limitations, the methods used for this study have the benefit of being comprehensive, (i.e. Canada-wide coverage), economical and repeatable over time Even after adjustments were made to provide more conservative estimates, results show no more than 1 in 3 potential donors in Canada became actual donors of transplanted organs. If Canada were to realize its full potential an additional 3,500 solid organs a year could be available for transplant. The study found a two-fold difference between provinces in conversion of potential donors into actual donors. The study also identified two important categories of under-used potential donors: patients with cardio-circulatory deaths (vs. brain deaths) and older patients (ages 60 older). A regression analysis found teaching hospitals were significantly more likely to convert potential donors than community hospitals, and that patients who died during the day were more likely to become donors than those who died at night. Results show a wide variation in practice of deceased donation in Canada, with room to significantly improve donation from cardio-circulatory deaths and older donors in particular. Leading countries have focused on these two areas to improve the supply of available organs. The way hospital care is organized can also influence donation.

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C4.2 Do patients attending different models of primary care in Winnipeg differ in complexity?

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

To describe the complexity of patients attending 5 different models of primary care delivery in Winnipeg. This cohort study uses de-identified administrative data housed at the Manitoba Centre for Health Policy. We assigned 626,264 Winnipeg residents to the primary care provider (family physician or nurse practitioner) that provided the majority of their care over three years. The providers were grouped into one of five models of care: academic teaching units, fee-for-service (FFS), Pay-for-performance FFS, community health centers and access centers. Complexity was defined by percentage of patients in the model who fit in one of eight categories. There was significant variability in the proportion of patients with each of the complexities between models. Children in care varied from 1.9 to 14.4% in different models; having a teen mother varied from 6.8 to 21.5%; teens having given birth varied from 5.6 to 15.5%, living in social housing varied from 2.6 to 20.3%, being on income assistance varied from 7.1 to 42.4%, being diagnosed with major mental health diagnosis varied from 9.1 to 12.1%, being new to the province varied from 1.7 to 8.5% and having high residential mobility varied from 12.1 to 31.6%. Community centers had the highest complexity rates for six complexities. FFS had the highest percentage of newcomers and access centers the highest percentage mental health diagnoses. While these results confirm a clinical meaningful difference in complexity between patients receiving primary care through different models of care organization and delivery, some of the findings are surprising. These findings are important in determining ideal panel sizes and funding for alternate funding models for primary care providers.

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C4.3 An Examination of Two Alberta Strategic Clinical Networks Through a Knowledge Translation Lens

Presented by **KELLY MRKLAS** KT Implementation Scientist, Alberta Health Services

Within health sectors across the globe, there is intensified focus on patient safety and quality improvement. In 2012, Alberta created Strategic Clinical Networks (SCNs) to translate evidence into improvements. This study used a knowledge translation (KT) lens to examine two of Alberta's SCNs and determine how evidence informed QI innovations, how stakeholders were engaged, to identify barriers and facilitators to knowledge uptake/engagement and how these were addressed by SCNs. A comparative case study method was used, offering multiple lenses for understanding KT structures and processes. Participants were recruited through SCN membership lists and their contacts with an extended community of QI innovation end-users. Data were collected using iterative document review, observation of SCN meetings and individual interviews, comprising SCN leaders, SCN core committee members, clinicians, support staff and other organizational and community members. Coding and thematic analysis was undertaken using an analytic filter that included a taxonomy of barriers and facilitators for knowledge use, theory-based domains and the KTA cycle. NVivo 9 was used to manage, index and theorize findings. An integrated cross-case report of two SCNs produced a rich, robust picture of KT within SCNs. Key themes were engagement (levels and barriers/facilitators), knowledge to action mechanisms, implementation (evidence integration, project- and SCN-level implementation strategy, links to engagement, implementation planning and teams) and a summary of key early indicators of SCN success. Engagement was identified as a pervasive overarching theme linked to each of the other key themes. Implementation teams were identified as an area for future development to plan, execute and sustain improvements. The relationship between engagement and implementation was shown to be inextricable, beginning with the need for focus on questions of mutual interest and extending into collaborative efforts to align with business cycles to facilitate sustained improvements. SCNs were identified positively by participants as 'clinical innovation machines' and successes were described as process, patient, and system outcome focused. Use of a KT lens to examine SCNs provided important insights into how evidence informed practice change, provided a rich understanding of stakeholder engagement and its linkage with other key themes. Importantly, key barriers and facilitators to KT were identified that can be used to guide the enhancement of network success.

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C4.4 Risk Communication and Values Clarification in Primary Care: A Descriptive Study

Presented by **HOLLY WITTEMAN** Assistant Professor, Université Laval

To assess patient perceptions of risk communication and values clarification in primary care, including whether patients perceive that clinicians: (1) discuss risks and benefits during consultations, (2) use numerical estimates to describe risks and benefits, and (3) ask patients about what is important to them. We invited clinicians and patients in 4 university-affiliated family medicine clinics to participate in this mixed-methods observational study in summer 2014. During 4-5 consecutive days in each clinic, we collected written questionnaires from participating clinicians and patients prior to consultations assessing subjective numeracy (confidence with numbers) and decision-making style preferences (physician-led, shared, or patient-led). Patients completed a second questionnaire immediately after their consultation about their perceptions of the visit, including whether or not the clinician discussed risks and benefits, if so, whether they used numbers, and whether or not they had been asked about what was important to them. Of those invited, 69/72 clinicians (97%) and 218/309 patients (71%) participated. Clinicians were 37 physicians, 28 residents, 8 nurses and 1 nutritionist. Patients were 27% men and 73% women with median age 39 (range 16-81) and a broad range of educational attainment. Patients and clinicians differed in their decision-making style preferences (Fisher's Exact $p<.001$), with patients' dominant preference being patient-led (58%) versus clinicians' dominant preference for shared (55%). According to patients' post-visit reports, decisions were taken during 57% of consultations. Within these consultations, clinicians discussed risks and benefits in 78% of visits and asked patients what was important to them in 66% of visits. Within consultations in which risk-benefit discussions occurred, clinicians used numbers in 34% of visits. Primary care clinicians and patients want patients to participate actively in health-related decisions. This study suggests that there is room for improvement to help achieve such active patient participation in decision-making by improving communication about risks, benefits, use of numbers and what is important to patients.

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C5 QUALITY, SAFETY & PERFORMANCE MEASUREMENT / QUALITÉ, SÉCURITÉ ET MESURE DU RENDEMENT

Fontaine G

C5.1 Do indicators of health system performance for older adults change over time? An analysis of multiple frail cohorts

Presented by **SIMA GANDHI** Epidemiologist, Institute for Clinical Evaluative Sciences; **SUSAN BRONSKILL** Scientist & Program Lead, Institute for Clinical Evaluative Sciences

Older adults represent a growing population in Ontario and in recent years important health system investments have been made to address their needs. By profiling a series of health system performance measures over time across different cohorts of frail older adults, this study examines subgroup-specific impacts of these investments. This population-based, repeated annual cross-sectional study used linked health administrative databases to identify older adults, aged 66 and older in Ontario, Canada, between 2002/03 and 2012/13. We identified thirteen relevant cohorts of older adults based on clinical comorbidity, functional characteristics, care setting and historical health system costs. We compared 14 health system performance indicators of system access, effectiveness, safety, and health status within cohorts over time and across cohorts. Changes over time were tested in separate linear regression models, using time as the independent variable. In 2012/13, 1,762,417 community-dwelling older adults were identified; 36% were in two or more cohorts. The largest cohort was the morbidity burden cohort (23%); while the behavioural symptoms cohort was smallest (0.3%). From 2002/03 to 2012/03, hospitalization rates decreased (216 to 192 per 1,000 population, p<.0001), as did primary care visit rates (6357 to 4864 per 1,000 population, p<.0001). Hospital readmissions remained stable (113 to 115 per 1,000 population, p=.11). Within-year variation in rates of emergency department visits was nearly three-fold between the high CHESS (1628 per 1,000 population) and older adult cohorts (580 per 1,000 population). High variability was found for preventable ED visits and hospitalizations while access to a usual provider of care demonstrated least variation across cohorts. This study confirms the heterogeneity of older adults in Ontario and highlights the value of identifying key frail subgroups when comparing and contrasting performance indicators. Findings provide a foundation to examine future impacts of investments in services for the older adult population in Ontario.

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C5.2 Experiences of an emergency department visit among patients aged 75 and over

Presented by **JANE MCCUSKER** Principal Scientist/Professor, St. Mary's Research Centre/McGill University

To describe the experiences of an emergency department (ED) visit among patients aged 75 and over who are discharged home from a metropolitan, university-affiliated hospital serving a multi-ethnic population. We recruited a cohort of patients aged 75+ at an ED visit. A proxy family member informant was recruited if patients were cognitively impaired or medically unstable. Information on experiences during the ED visit were gathered in a telephone interview conducted a few days after the visit (median=5, range=1 to 31 days) and included questions on 16 potential problems with care received during the visit. Three problem experience scales were constructed based on multiple correspondence analysis and thematic analysis: personal quality of care (8 items), waiting times (3 items), and discharge information (5 problems). Higher scores indicate more problems. 88 eligible patients were recruited at an ED visit 75 (85%) completed the follow-up interview. The mean age of the sample was 83.0, 72% were female, 51% were born in Canada, 39% were on stretchers, 39% were high-risk of functional decline [Identification of Seniors At Risk (ISAR) score 2+], 23% had a proxy informant, 88% had a family doctor, 24% were receiving homecare services. The mean problem experience scores were lower (better) for personal quality of care (mean 1.7/8 potential problems = 21%), compared to waiting time scores 1.5/3 (50%) and mean discharge information scores 2.5/5 (50%). No patient characteristics predicted personal quality of care or discharge information. Stretcher patients and those who were ISAR positive reported fewer waiting time problems (p<.01). Participants report proportionally more problems with long waiting times and lack of discharge information, compared to personal quality of care. More problems with waiting times are reported by lower risk, ambulatory patients, suggesting that the ED appropriately prioritizes care of higher risk patients.

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C5.3 High Users of Acute Care Services - Who Are They? Assessing Variability across Canada

Presented by **JOSEPH AMUAH** Project Lead, Indicator Research and Development, Canadian Institute for Health Information

Research has demonstrated that a small proportion of the population uses a large percentage of healthcare resources. There is no pan-Canadian indicator of high users of inpatient acute care services. A comparable pan-Canadian indicator is being developed to monitor provincial/territorial/regional variations in high users of inpatient acute care services. Data from the Discharge Abstract Database, the Ontario Mental Health Reporting System, the Hospital Morbidity Database, and the National Ambulatory Care Reporting System from 2012-2013 were linked to identify patients that made use of inpatient acute care services across Canada. Patients were followed-up over a period of one year to identify patients with repeat hospitalizations and their cumulative length of stay (LOS) over the follow-up period. Consultation with expert advisors and exploratory analyses were conducted to determine a threshold of repeat hospitalizations and cumulative LOS to classify patients as high users of inpatient acute care services. Using a combination of 3+ hospitalizations and 30+ days cumulative LOS, 4.4% of Canadian patients were classified as high users of inpatient acute care services. Provincial rates of high users ranged from 4.1% in Ontario and Nova Scotia to 5.4% in PEI; health regional rates varied from 3.1% to 6.4%. Variations may be attributable to differences in service delivery, alternative level of care designation, data collection, and patient characteristics. Overall, high users tend to be patients older than 65 years (65.2%). The top 5 reasons for admission included mental health (12.4%), palliative care (5.8%), COPD (5.6%), heart failure (5.6%) and viral pneumonia (3%). This indicator provides a pan-Canadian perspective of high users of acute care services from both an effectiveness (repeat hospitalizations) and efficiency (cumulative LOS) lens. This indicator can help policy-makers and health-care planners to identify populations at risk and design strategies or community programs to potentially reduce high intensity use of acute care services.

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C5.4 The Influence of Primary Care, Specialist, and Home Care Services utilization on Emergency Department use among Home Care Clients

Presented by **ANDREW COSTA** Assistant Professor, Schlegel Chair in Clinical Epidemiology & Aging, McMaster University

Home care clients are prevalent and at high risk for emergency department (ED) use. Little population-level research has examined the determinants of ED use among home care clients. Our objective was to examine the influence of primary care, specialist, and home care services utilization on ED use after adjusting for person-level risk factors. A population-level cohort study was conducted on long-stay, community-dwelling home care clients in Ontario (2011-2012, N=130,749). Client clinical characteristics were derived from the RAI-Home Care assessment, and risk for ED use was classified using the DIVERT Scale. Primary care, specialist, and home care services utilization covariates were captured from relevant administrative databases. Dependent variables were any ED visit within 6-months of an assessment and time to first ED visit (censored at 6-months post assessment). Multivariate logistic regression and stratified cox proportional hazard regression were used to determine the influence of other health services utilization on ED use after adjusting for person-level ED risk factors. Home care clients were elderly, the majority were female, many had brittle informal support, and functional deficits were common. Overall, 45.8% of home care clients had at least one unplanned emergency department visit within 6 months of an assessment. The cohort had a mean of 7.64 primary care visits in the previous year, and the majority (69.7%) with a consistent provider. Overall, 18.6% had at least one cardiologist consult and 10.1% had a geriatric consult in the previous year. High rates of primary care use and home care nursing during the risk period were associated with more immediate ED utilization when adjusting for ED risk. Among home care clients at high risk for ED use (Hazard Ratio = 1.95), primary care use and home care nursing showed little influence on time to time to first ED visit. The results of the study articulate the influence of primary care, specialist, and home care services utilization on ED visits and can support the targeting of preventative schemes in home care. Data suggest that preventative services may have little influence on ED use among high-risk home care clients and that investments in preventative interventions for these clients may not be cost-effective.

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C6 RESEARCH METHODS OR INNOVATIONS / MÉTHODES DE RECHERCHE OU INNOVATIONS Fontaine H

C6.1 A Comparison of Comorbidity Measures for Predicting Healthcare Utilization in Cancer Patients

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

Cancer patients often have multiple comorbidities as pre-existing conditions or consequences of their cancer. The impact of comorbidity on the healthcare system may be large, but not equivalent across conditions. Our purpose was to compare the performance of comorbidity measures for predicting healthcare utilization in populations with diagnosed cancers. Data were from the Manitoba Centre for Health Policy and included cancer registry, hospital discharge abstracts, physician billing claims, and prescription drug databases. The study cohort included adults (18+) with cancer diagnoses (breast, colorectal, lung, prostate) between 1997 and 2011. Comorbidity was measured by: Charlson index, Elixhauser index, Chronic Disease Score, number of diagnoses, number of prescription drugs, and Johns-Hopkins Aggregated Diagnostic Groups. Healthcare utilization measures included hospitalization, number of physician visits, and number of prescription dispensations one year following cancer diagnosis. Generalized linear regression models were used to assess comorbidity measure discrimination, prediction error, and reclassification performance. For breast (n=8485), colorectal (n=7903), lung (n=8689), and prostate (n=7423) cancers, three-quarters of the cohort were hospitalized within one year following cancer diagnosis and they had an average of 13 physician visits and 26 prescriptions. For hospitalization, the Elixhauser index improved discrimination (c-statistic) between 1.2% (prostate) and 3.5% (colorectal) over a base regression model containing socio-demographic and cancer treatment variables; other comorbidity measures resulted in smaller improvements and the reductions in prediction error and reclassification were modest. For physician visits, the number of diagnoses performed best for all but colorectal; improvements in prediction (R-square) ranged from 3.2% (lung) to 81.5% (prostate). For prescription dispensations the Chronic Disease Score performed best, with R-square improvements ranging from to 42.6% (lung) to 328.7% (breast). Comorbidity is an important predictor of healthcare use in cancer patients, but not all measures have equivalent performance; the choice depends on the utilization measure and cancer type. Cancer registries do not contain comorbidity information; linkage with administrative databases ensures that comorbidity is included in population-based healthcare studies.

Co-Author(s): Mark Smith, Manitoba Centre for Health Policy / Marshall Pitz, CancerCare Manitoba / Rashid Ahmed, CancerCare Manitoba / Heather Prior, Manitoba Centre for Health Policy / Ankona Banerjee, Manitoba Centre for Health Policy / Ina Koseva, Manitoba Centre for Health Policy / Christina Kulbaba, Manitoba Centre for Health Policy / Say Hong, Manitoba Centre for Health Policy

C6.2 Quality of Hospital Discharge Abstract Database over Time

Presented by **JASON JIANG** MSc Student, University of Calgary

To assess the trends of validity of hospital discharge abstract databases (DAD) in recording comorbid conditions from 2002 to 2014, and to investigate factors associated with the trends. We hypothesize that the validity of DAD increased over time. We linked DAD with a clinical database; Alberta Provincial Project for Outcome Assessment in Coronary Heart Disease (APPROACH). APPROACH contains data on nearly all patients receiving cardiac catheterization in Alberta and the data is directly entered when clinicians see patients. In DAD we defined 11 chronic conditions using validated ICD-9-CM/ICD-10 coding algorithms (hypertension, hyperlipidemia, diabetes types 1 and 2, heart failure, peripheral vascular disease, cerebrovascular disease, pulmonary disease, malignancy, liver disease and gastrointestinal disease). We used the APPROACH data as “gold standard” and calculated sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) for 11 conditions. Overall 60543 patients were linked between DAD and APPROACH. Of 11 conditions, only hypertension and type 2 diabetes had increasing sensitivity from 2002 to 2014 (hypertension: 63.6% - 84.5%, type 2 diabetes: 64.2% - 90.9%). Sensitivities of remaining conditions showed no clear trend. Specificity was high (>90%) and consistent from 2002 to 2014 for 9 conditions. However, specificity for hypertension declined (84.5% - 76.7%), and specificity for hyperlipidemia increased (84.5% - 94.5%). PPV for heart failure and liver disease declined from 2002 to 2014 (heart failure: 49.16% - 38.21%, liver disease: 36.6% - 20.0%). PPVs of the remaining 9 conditions followed no obvious trend. NPV was consistently high (>85%) for 9 conditions except for hypertension (40% - 70%) and hyperlipidemia (20% - 40%). Increased sensitivity was only seen in 2 conditions. Our findings does not support the hypothesis that case identification is improving due to better coding conditions over time. For most conditions assessed in this study, data quality has not affected the reliability of trend analysis and disease surveillance using DAD.

Co-Author(s): Cynthia Beck, University of Calgary / Matthew James, University of Calgary / Mingshan Lu, University of Calgary / Hude Quan, University of Calgary

C6.3 The Flow – An innovative application developed by the McGill University Health Center allowing patient-centered communication by physicians and nurses using their personal smartphones

Presented by **AUDE MOTULSKY** Post-Doctoral Fellow, McGill University

The Flow application was developed in 2013 by the McGill University Health Center. It allows for protected and tracked communication among clinicians using their personal smartphones. The objective of this study was to describe the application, how it is used and the potential benefits according to users. The data collection consisted of a case study including the two pilot intensive care units (ICU) where the technology was implemented at the Montreal Children’s Hospital. Data from multiple sources were gathered to allow for a comprehensive description of the case. Qualitative data consisted of think-aloud observations of the technology as used by typical users, interviews with champion users and focus groups with users. Journal of entries of the Flow app were retrieved for one month. Content analysis and social network analysis were performed per unit to give a detailed description of usage patterns. The app was used by 245 clinicians in a 12-month period. In October 2014, a mean number of 10 and 6 unstructured messages (flows) were written per patient per day by clinicians on the neonatal and pediatric ICUs, respectively. 68% of all flows were entered by physicians. Messages were categorized per system according to a structure defined by clinicians. The app was predominantly used to standardize the handoff process by generating a paper patient list with the last entry per category. Clinicians perceived this technology as easy to use and having the potential to improve the accuracy of the communication during handoff. Push notification features and targeted group communication were requested by users. Concerns about interoperability with the hospital electronic patient record were voiced. This case study gives a detailed description of an innovative app developed internally with minimal resources. It reveals promising avenues to take advantage of the “informal” use of smartphones by clinicians in many settings by integrating their use into clinical practice and electronic patient records.

Co-Author(s): Aude Motulsky, McGill University / Jean-Pierre Cordeau, McGill University Health Center / Jorge Pomalaza, McGill University Health Center / Jeffrey Barkun, McGill University Health Center / Robyn Tamblyn, McGill University

C6.4 Strengthening Public and Patient Involvement in Health Technology Assessment

Presented by **JULIA ABELSON** Professor, McMaster University

Efforts to produce a comprehensive, evidence-informed framework to guide public and patient involvement (PPI) in organizations conducting health technology assessment (HTA) have been rare. This presentation will share the inputs to and product of such an effort, carried out in collaboration with Health Quality Ontario (HQO) and the McMaster Health Forum. The framework development process was informed by the deliberations of HQO’s Public Engagement Subcommittee, and by the outputs of an independently-funded research team working in collaboration with the committee. The following evidentiary sources informed the committee’s deliberations: i) a website scan of international HTA organizations’ PPI practices; ii) a comprehensive review of published reviews, empirical and conceptual literature about PPI in HTA between 1990 and 2013; iii) key informant interviews with international experts in the field of PPI and HTA; and iv) a dialogue of key provincial, national and international stakeholders convened by the McMaster Health Forum in May 2014. The presentation will focus on the final framework produced from this work which includes the following core elements: i) the articulation of the underlying principles, values and goals for PPI in HTA (e.g., democratic/procedural, instrumental, and developmental); ii) the establishment of a common language to support PPI efforts (e.g., clarifying the meaning of ‘public’, ‘patients’ and ‘stakeholders’, and levels of involvement; iii) the description of a flexible array of approaches that can be used depending on the goal and phase of the HTA process (e.g., who to involve, using which mechanisms and at what stages of the HTA process); and iv) supports for monitoring the quality and impacts of PPI on HQO’s HTA decision-making processes. This public and patient involvement framework has been developed for implementation in Ontario’s HTA decision-making process. However, the core elements of this framework are broadly applicable to organizations that carry out HTA activities in Canada and around the world as well as other health system organizations pursuing health quality agendas.

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C7 PANEL / PRÉSENTATION EN PANEL Mont Royal

C7 Knowledge Translation Across Health Disciplines: Lessons on Successful Engagement and Meaningful Impact. An SWG-Led Panel

Application des connaissances dans toutes les disciplines de la santé : enseignements sur la participation réussie et les incidences véritables. Dirigé par le GTÉ

Presented by **ERICA BRIDGE**, Graduate Student, Brock University; **SCOTT MITCHELL**, Director, Knowledge Transfer - Canadian Mental Health Association Ontario; **ARIELLA LANG**, Nurse Researcher, Victorian Order of Nurses; **FRANCE LÉGARÉ**, Professor, Department of Family Medicine - Université Laval

Knowledge translation is a complex process that includes the synthesis, dissemination, exchange, and ethically-sound application of information. In healthcare, the exchange of knowledge contributes to the provision of effective health services to strengthen the health system and improve population health. Evidence-based research can successfully inform practice and policy; however the process through which this is achieved is often complex and unclear. This session will focus on learning how evidence from different healthcare disciplines is effectively communicated to various stakeholders in order to encourage practice development and policy-making. This year's conference theme is "Learning from each other: Across disciplines, jurisdictions, and generations." Knowledge translation in health services is a topic of great importance and interest to students, researchers, decision-makers, policy-makers, funders and knowledge users, yet the concept is often poorly understood. By sharing experiences across disciplines, we can all optimize our chance of successfully disseminating our research. The goals of this SWG-led panel session are to: a) provide a basic understanding of the elements that support knowledge translation; b) understand how to foster an environment for knowledge translation; c) learn to communicate in a globalized context with policy-makers, decision-makers, and knowledge users using effective knowledge translation tools; and d) understand the facilitators of and barriers to knowledge translation for health services and policy researchers. The goals will be explored using examples from the following disciplines: a) mental health, b) long-term care, c) infectious diseases, and d) primary care. While targeted at students, the session is open to all conference participants who are interested in an educational discussion with practical implications in this emerging field. Session Overview This panel session features four panel members and a moderator, who will be contacted upon confirmation of abstract selection. The panelists will be experts in their field and will each represent one of the above-mentioned disciplines, thereby presenting a more holistic view of knowledge translation. 1) Introduction The session will begin with a CAHSPR Student Working Group (SWG) member introducing the panelists and moderator, and providing our rational for the session. 2) Panelist Presentations Each panelist will give a 15-minute presentation during which they will be asked to address the following questions: A) What is knowledge translation? Panelists will present a brief overview of what knowledge translation means in their respective disciplines. They will also highlight key players involved in the knowledge translation process. B) What are the common knowledge translation techniques working in your discipline? Panelists will present key knowledge translation tools used in their area, describe how these tools are selected, and elaborate on the steps involved in the knowledge translation process. Panelists will be asked to illustrate their points through real-world examples. C) Are there any concerns and pitfalls for young health policy researchers to avoid? Panelists will offer additional insight to young researchers by speaking to some knowledge translation successes and failures they have experienced or observed. 3) Question and answer period and additional learning. The moderator will lead a discussion and will field questions from the audience to the panelists.

Wednesday, May 27, 2015 – 3:15pm - 4:30pm SESSION D

Le mercredi 27 mai 2015 – 15 h 15 – 16 h 30 SÉANCE D

D1 AGING / VIEILLISSEMENT Fontaine C

D1.1 A population-based examination of interventions near the end-of-life and their effect on location of death

Presented by **SARAH BEACH** Research Assistant, The Ottawa Hospital Research Institute

To systematically examine the predictors of location of death, with focus on physician home visits in the last year of life. This population-based study describes where Ontarians died and indicates potential effects of home-based interventions at the end-of-life. Using population-based health administrative databases, this retrospective cohort study identified all deaths in Ontario from April 1, 2010 to March 31, 2013. Health care use in the last year of life and location of death were examined. Among 264,755 decedents, 45.7% died within an acute care hospital, 7.7% in complex continuing care, and 17.4% in long-term care (LTC). Twenty-nine percent of the population died outside of these institutions. A slight shift away from institutional deaths was observed from 2010 (54.4%) to 2013 (51.9%). Adjusting for age, sex, income quintile, rurality, number of chronic conditions, and rostering to a family physician, receiving palliative home care was associated with a 64% reduction in risk of dying in an institution (not including LTC). The same model, adjusting for home care, showed that having one physician home visit was associated with a 55% decreased risk of institutionalized death. Unrostered patients were associated with a 30% higher risk of institutionalized death. Although location of death is related to severity of illness, it is also associated to health system factors, including home care and physician home visits. Less than one-third of the population, however, received palliative home care or physician visit in their last year of life, indicating large room for improvement.

Co-Author(s): Peter Tanuseputro, The Bruyère Research Institute / Mathieu Chalifoux, The Institute for Clinical Evaluative Sciences / Doug Manuel, The Ottawa Hospital Research Institute

D1.2 Places of care: A Population-based examination of predictors to where people spend their last days of life

Presented by **PETER TANUSEPUTRO** Research Fellow, The Bruyère Research Institute

To determine the number of days spent by Ontarians in health care institutions during the last 30 and 90 days prior to death. Using the Ontario Registered Persons Database, we identified all registered deaths between April 1, 2010 and March 31, 2013. For each decedent, it was determined how many days were spent in acute care, complex continuing care (CCC), rehabilitation, and emergency room facilities in the 30 and 90 day prior to death. A total of 264,755 deaths occurred during the study period. On average, in the last 30 and 90 days of life, a total of 9 and 16 days were spent in acute care, CCC, emergency rooms, or rehabilitation, respectively. Analysis from multivariable models that adjusted for age, sex, income quintile, rurality, number of chronic conditions, and rostering to a family physician, receiving palliative home care was associated with 7 less days in institutions and physician visits by 3 to 7 less days (for 1 and 7+ home visits, respectively), during the last 90 days of life. Less than one-third of the population, however, ever received palliative home care or a physician visit in their last year of life. Ontarians spent a significant amount of time in institutions at the end-of-life. Decreasing time in institutions was associated with being rostered to a primary care physician, receiving physician home visits, and palliative home care. This study points to how changes to service provisions can potentially reduce time spent within institutions at end-of-life.

Co-Author(s): Sarah Beach, The Ottawa Hospital Research Institute / Mathieu Chalifoux, The Institute for Clinical Evaluative Sciences / Hsien Seow, Department of Oncology, McMaster University / Douglas Manuel, The Ottawa Hospital Research Institute

D1.3 Trends in staffing in Ontario's Long-Term Care Homes: Are there differences by profit status and chain ownership?

Presented by **AMY T.M. HSU** Research Fellow, The Ottawa Hospital Research Institute (OHRI)

Ontario has the highest proportion of for-profit operated long-term care (LTC) homes in Canada. Increasingly, these are also operating as members of a multi-facility chain. However, the association between chain operation and staffing levels has not received as much attention in empirical research as profit status, and existing evidence has been inconclusive about its implication on quality of care. Using longitudinal data (1996-2011) obtained from Statistics Canada's Residential Care Facilities Survey, staffing levels were compared across five ownership types: for-profit chain-owned homes, for-profit independently-owned homes, not-for-profit chain-owned homes, not-for-profit independently-owned homes, and municipal homes. Our analysis revealed significant differences in staffing levels by profit status and chain membership. Specifically, we found for-profit LTC homes – especially those who were members of a chain organization – provided significantly ($p < 0.05$) fewer hours of direct care as well as nursing care per resident day than other types of providers, after adjusting for differences in residents' care needs. Residents in municipal homes received an average of 20 minutes more direct care per day, compared to those residing in for-profit chain homes. Moreover, municipal operators were able to achieve this by providing more hours of RPN care than other types of operators. Results presented in this paper signal a need for a better understanding of care delivery models, how more effective staffing "mix" is achieved among some homes (e.g. municipal homes), and its impact on resident outcomes. Finding from this study offers insights into concerns about inadequate staffing in Ontario's LTC homes and has implications for other jurisdictions where an increasing presence of for-profit chain operators have been observed.

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D1.4 Understanding the Characteristics and Resource Utilization Patterns of Long-Term Care Residents in Ontario

Presented by **HELEN WEI** Senior Analyst, Canadian Institute for Health Information

The objective of this study was to use the new interactive Case Mix eReports to understand the characteristics and resource utilization patterns of residents in long-term care settings in Ontario. The Case Mix eReports use data from the Continuing Care Reporting System (CCRS) at the Canadian Institute for Health Information (CIHI). The findings are based on 113,424 residents from 636 long-term care homes in Ontario in fiscal year 2013-2014. The case-mix system used in the eReports is the Resource Utilization Groups, Version III (RUG-III), which classifies residents into similar groups based on their clinical characteristics and resources required for care. The RUG-III divides residents into 7 major categories and 44 subgroups based on resource intensity. The results show that over half (53.3%) of Ontario long-term care residents were 85 years and older and over two-thirds (67.7%) were female. Among residents, hypertension and dementia were the most common diagnoses (62.3% and 61.9%, respectively). Nearly half (46.5%) of residents showed some aggressive behavior and one-third (33.1%) showed signs of depression. In terms of resource use, 45.2% of the residents were assigned to the least resource intensive category, Reduced Physical Function, which includes residents who do not have complex health issues. The second and third most frequently assigned categories were Clinically Complex (21.9%) and Special Care (11.5%). The most resource intensive category, Extensive Services, is the sixth most frequent at 3.2%. These Extensive Services residents require extensive clinical care. The use of eReports allows policy-makers to gain an understanding of resource intensity and care needs of the resident population in long-term care homes. Understanding the case mix of the residents is information that can inform decisions about program planning, quality improvement, resource and funding allocation.

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D2 ACCESS, EQUITY & YOUNG / ACCÈS, ÉQUITÉ ET JEUNESSE Fontaine D

D2.1 Association of hyperbilirubinemia guidelines with socioeconomic disparities in newborn follow-up

Presented by **ELIZABETH DARLING** Assistant Professor, Laurentian University

To determine whether implementation of universal bilirubin screening in Ontario, Canada was associated with improved rates of recommended follow-up care across socioeconomic status (SES). Design: Retrospective population-based cohort study using survey and health administrative data. Setting: 97 of 100 hospitals providing maternity care. Population: 733,990 newborns born at ≥35 weeks gestation discharged to home from hospital within 72 hours of birth between April 1, 2003 and February 28, 2011. Intervention: Implementation of universal bilirubin screening (occurred between 2007 and 2011 in 67 hospitals). Main outcome measures: Recommended follow-up care (i.e., physician visit within one calendar day after discharge for babies discharged ≤24 hours after birth, or physician visit one or two calendar days after discharge for babies discharged between 24-72 hours after birth). Implementation of the guidelines was associated with a modest increase in recommended follow-up from 29.9 % to 35.0% (n=711,242, adjusted relative risk: 1.11, 95% confidence interval 1.00 to 1.22, p=0.047). There was a striking socioeconomic gradient in the crude percentage increase in recommended follow-up associated with guideline implementation (ranging from 0.3% in the lowest quintile to 29.0% in the highest quintile), with a significant interaction between guideline implementation and material deprivation status. Disparity in recommended follow-up increased following guideline implementation, with 40% of the crude increase attributable to the highest SES quintile and none to the lowest SES quintile. Implementation of universal bilirubin screening has had limited impact in ensuring timely follow-up for Ontario newborns. This represents an ongoing weakness in efforts to prevent severe hyperbilirubinemia, and illustrates how universal programs which fail to address root causes of disparities may improve overall population health outcomes but cause increased inequity.

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D2.2 Impact of the Healthy Baby Prenatal Benefit on Perinatal Outcomes: A PATHS Equity for Children Project

Presented by **MARIETTE CHARTIER** Associate Professor, Senior Research Scientist, University of Manitoba, Manitoba Centre for Health Policy

In Manitoba, low-income pregnant women are eligible for the Healthy Baby Prenatal Benefit (HBPB), an income supplement provided during the second and third trimester of pregnancy. The objective of this study was to determine the impact of the HBPB on newborn outcomes and health equity. Data from the Manitoba Centre for Health Policy on Income Assistance (IA), HBPB, hospital births, and prenatal and maternal risk factors were linked to identify all women receiving IA during pregnancy giving birth in 2001/02-2011/12 (N=14,591). Propensity score weighting was used to adjust for differences between treatment (receipt of HBPB; n=10,738) and control (no HBPB; n=3,853) groups. Logistic and linear regressions compared treatment and control groups on breastfeeding initiation, low birth weight, preterm birth, small- and large-for-gestational age (SGA, LGA), 5-minute Apgar scores, neonatal readmission, birth hospital length of stay, and to compare population inequities with and without the HBPB. Receipt of the HBPB was associated with statistically significant reductions in low birth weight (OR: 0.71; 95% CI: 0.63, 0.81), preterm (OR: 0.76 (0.69, 0.84)) and small-for-gestational age (OR: 0.90 (0.81, 0.99)) births and statistically significant increases in breastfeeding initiation (OR: 1.06 (1.03, 1.09)) and large-for-gestational age births (OR: 1.13 (1.05, 1.23)). For infants born vaginally, the HBPB was associated with shortened birth hospitalization length of stay (X=2.86, p<0.0001). Gamma sensitivity analysis found results for breastfeeding, low birth weight, preterm birth and length of stay were robust to unmeasured confounding. The disparity between infants born to low and high income women was reduced for low birth weight and preterm births (p<0.05). A modest income supplement during pregnancy was associated with improved birth outcomes for infants born to low-income women as well as reductions in inequities in health at birth. Placing conditions on income supplements to low-income pregnant women is not necessary to promote prenatal and perinatal health.

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D2.3 Determinants of pre-adolescent physical activity – a case for action on social determinants of health

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

Childhood obesity, a precursor to adult obesity, increases the economic burden on the health care system. Optimal physical activity in children is important to prevent this epidemic. The study objective was to assess the role of aboriginal and socioeconomic status on physical activity in preadolescents. The Student Health Survey (2010/2011) was conducted to assess health status and risk behaviors of grades 5 to 8 students in Saskatoon Health Region. Multilevel binary logistic regression models tested the associations between physical activity (Kilocal/Kg/day (KKD)) and student-level covariates (i.e., age, gender, ethnicity, parent's employment status, parent's education level, socioeconomic status, self-reported Body Mass Index (BMI), self-rated health, and perceived number of friends), while accounting for clustering effects. Deprivation index based on neighbourhood social and material indicators was used to assess socioeconomic status (SES). Adjusted odds ratios (OR) with 97.5% confidence intervals (CIs) and variance partition coefficients were computed. The cohort consisted of 4528 students; 51.4% were female, 9.8% self-identified as aboriginal, 23.2% belonged to least socioeconomically deprived quintile. Only 16.4% were optimally active. Factors associated with optimally active (KKD>8) included least deprived (OR 2.17, 97.5% CI 1.25 – 3.85), excellent/very good health (OR 4.57, 97.5% CI 3.01 – 6.92), optimal BMI (OR 1.65, 97.5% CI 1.00 – 2.71), and having many friends (OR 3.08, 97.5% CI 1.74 – 5.47). Factors associated with optimally or moderately active (KKD>3) included Aboriginal status (OR 1.85, 97.5% CI 1.22 – 2.82), both parents employed (OR 1.75, 97.5% CI 1.26 – 2.42), at least one parent university graduate (OR 2.44, 97.5% CI 1.56 – 3.82), excellent/very good perceived health (OR 4.57, 97.5%CI 3.01 – 6.92) and having many friends (OR 2.72, 97.5% CI 1.35 – 5.49). Physical activity levels were not optimal among most students, and were lower among Aboriginal and low income students. Population-level interventions designed to affect social determinants of health are critical in improving the childhood physical activity levels and predict better overall health in adulthood.

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D2.4 Inequalities in the Cancer Drugs Fund in England: access and survival by deprivation score

Presented by **CHARLOTTE CHAMBERLAIN** NIHR Doctoral Fellow, Clinical Research Fellow, University of Bristol

The English Cancer Drugs Fund (CDF) aims to increase access to high-cost cancer drugs in order to improve cancer survival for all patients with advanced stage cancers. Our objective was to investigate whether access to the CDF, and survival among CDF patients, was associated with Index of Multiple Deprivation (IMD). The CDF funds high-cost cancer drugs which are not in routine use in the English National Health Service (NHS) because their cost-effectiveness has not been proven. Advanced (stage IV) cancer patients and haematological cancer patients who were potentially eligible for CDF drugs were identified through the South West England Cancer Registry and were compared with patients who had received drugs via the CDF. Proportions of patients in each IMD quintile were compared using Chi-squared tests. Cox regression was used to analyse time-to-death by IMD quintile, adjusted for age, sex and NHS healthcare area. 80 different high-cost cancer drugs were prescribed to 3,086 people in 2011-2013 in the South West region of England (cancer population 27,917 (2012)). Haematological (788), urological (644) and colorectal (605) cancers were the cancers most commonly treated on the CDF. The most deprived population quintile was under-represented in the CDF population for haematological (9% vs 20%), urological (11% vs 19%), breast (7% vs 18%) and colorectal (8% vs 20%) cancers (all $P<0.001$). Survival in haematological and other rare cancer types was substantially worse for the most deprived quintile compared with the most affluent quintile (Hazard Ratio (HR) 2.76 (95% CI 1.17-6.52) for haematological cancers) after adjustment for age, gender and cancer network. Survival was not associated with increased deprivation for common cancer types. Analysis is ongoing. The CDF in England appears not to provide equal access to high-cost cancer drugs or equal survival rates for some cancers among poorer patients. This is unlikely to be accounted for solely by worse comorbidities of poorer patients. Better understanding of variation in clinician referral by socio-economic status is needed.

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D3 PRIMARY HEALTHCARE (CANCER, MENTAL ILLNESS, ALCOHOL) / SOINS DE SANTÉ PRIMAIRES (CANCER, MALADIE MENTALE, ALCOOL)

Fontaine E

D3.1 Comprendre les déterminants du diagnostic précoce de cancer au Québec

Presented by **ASTRID BROUSSELLE** Professeure titulaire, Université de Sherbrooke

L’objectif est de comprendre le rôle des facteurs personnels et de l’organisation du système de soins, en particulier l’affiliation à une source habituelle de soins de 1re ligne, sur le diagnostic précoce de cancer. Nous analysons de quelle façon l’expérience personnelle et l’expérience d’utilisation des services de première ligne influencent le choix de la « porte d’entrée » dans le processus d’investigation, le temps écoulé avant le diagnostic et la présence d’un cancer métastatique au moment du diagnostic. L’étude porte sur trois sites fréquents de cancer : sein, poumon, côlon-rectum. Cette étude exploratoire comporte une enquête auprès de 438 patients adultes atteints de cancer inscrits dans une clinique d’oncologie d’un des quatre hôpitaux participants situés dans les deux régions les plus populeuses du Québec et une analyse d’entrevues auprès de 22 patients. L’expérience de soins auprès de la source habituelle de soins de 1re ligne exerce une influence, quoique faible, sur le choix de la « porte d’entrée » dans le processus menant au diagnostic du cancer et sur le temps écoulé avant le diagnostic. Nos résultats indiquent que, outre le site de cancer, le temps écoulé entre le début de la maladie et son diagnostic est un autre facteur susceptible d’accroître le risque d’avoir des métastases au moment du diagnostic initial. L’analyse qualitative indique que les facteurs personnels ont particulièrement déterminants pour expliquer les délais entre les premiers signes attribuables au cancer et l’investigation, et que l’organisation du système de soins expliquent les délais plus longs entre le début de l’investigation et le diagnostic. Cette étude permet d’identifier certains facteurs, tant au niveau de l’organisation du système de soins qu’au niveau de la sensibilisation du public qui permettraient d’améliorer le temps de réponse entre les premiers signes et le diagnostic de cancer, et ainsi réduire l’avancée du cancer au moment du diagnostic.

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D3.2 Primary care organizational characteristics supporting care for patients with mental-physical multimorbidity: a qualitative case study

Presented by **MATTHEW MENEAR** Post-Doctoral Fellow, Laval University

Patients presenting with mental-physical multimorbidity are common in primary care, yet are often at risk of receiving suboptimal care. To inform future quality improvement initiatives, we aimed to explore primary care providers’ perceptions of the organizational characteristics of their practice settings that supported high-quality care for these vulnerable patients. Theory-based qualitative, embedded multiple case study with four primary care clinics within two health and social service centres (CSSSs) in Montreal, Quebec. Clinics were sampled purposively based on survey data from project “Dialogue” to ensure diversity in organizational characteristics of clinics (clinic type, mental health services). Primary care providers were recruited using snowball sampling and participated in semi-structured interviews informed by a conceptual framework drawn from the knowledge management literature. Complementary data was collected based on non-participant observations, analysis of documents and feedback from participants on preliminary results. A thematic analysis was conducted by an interdisciplinary team, facilitated by NVivo. Sixteen primary care providers from different professions (e.g. family physicians, nurses, psychologists) were interviewed. They identified four types of organizational characteristics enabling high-quality care for patients with mental-physical multimorbidity: structural, social, technological and epistemic characteristics. Structural enablers included the type of clinic (CLSC vs private clinic, teaching site), physician payment model (salary), availability of clinical supervision, and organization of workspaces. Social enablers included norms of trust and mutual support and teamwork being valued highly. Technological enablers included electronic medical records systems permitting timely information sharing between clinicians, as well as web-based decision support systems. Epistemic enablers related to opportunities that allowed different types of professionals to exchange and apply knowledge, such as through interprofessional teamwork or case discussions involving primary care and mental health providers. This study identified several organizational characteristics in primary care settings that could be targeted in quality improvement efforts for patients with mental-physical multimorbidity. The influence of these characteristics is complex given their interconnected nature, but strategies seeking to make settings more knowledge-rich and collaborative should hold promise for improving care.

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D3.3 Effects of Family Medicine Groups on visits to the emergency department among diabetics in Quebec between 2000 and 2011: a population-based segmented regression analysis of an interrupted time series

Presented by **RENÉE CARTER** Student, McGill University

Family Medicine Groups (FMG) were introduced in Quebec in 2002 to re-organize primary care practices and encourage team-based and inter-professional approaches to service delivery. We measured visits to the emergency department (ED) as a proxy for access to and quality of primary care, before and after the reform using an open cohort of individuals diagnosed with Type 1 and Type 2 diabetes. Administrative databases were used to derive the weekly rate of ED visits for acute diabetes complications between April 1, 2000 and March 31, 2012. We performed an interrupted segmented regression analysis to derive the estimated and extrapolated rates of visits in the years following the introduction of the reform. We employed an outcome control series of diabetics visiting the ED to treat appendicitis to strengthen the study’s internal validity. After 9 years of reform implementation, we observed a reduction of 2.12 and 2.25 visits to the ED per 10,000 diabetics per week to treat acute diabetes complications in urban and rural areas, respectively. This accounts for approximately a 36% and 34% decrease in the weekly rate of visits in urban and rural regions, respectively. No change in the rate of visits to the ED for appendicitis was observed by the end of the study period. Our results suggest that the decreases in the rate of ED visits are attributed to the implementation of the FMG model across the province. The reform may have a cumulative effect over time owing to greater patient and physician familiarity with the model and the growing number of FMG practices established over time. Evidence of these decreases despite the low-intensity nature of the FMG reform suggests the potential for this model to act as a future platform for implementing comprehensive care models for chronic disease management.

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D3.4 Utilization of Emergency Departments (ED) in Cancer Patients in Manitoba, Canada

Presented by **MARK SMITH** Associate Director, Manitoba Center for Health Policy

The journey of a cancer patient through the healthcare system can be complex. The purpose of this research was to investigate emergency department (ED) utilization among individuals with a cancer diagnosis to test for differences in ED use before and after diagnosis and to predict time to death. Data were from the Manitoba Centre for Health Policy and included cancer registry, hospital discharge abstracts, physician billing claims, ED visits and vital statistics death records. The study cohort included adults (18+) with selected cancer diagnoses (breast, colorectal, lung and prostate) made between 2007 and 2011. Rates of ED utilization 1 year before and up to 2 years after diagnosis were compared between cancer patients and cancer-free individuals matched 1:1 on age, sex and Charlson comorbidity score using generalized estimating equations. The impact of ED use on time to death was tested using a multivariable Cox proportional hazards regression model. When comparing ED utilization between breast (n=1549), colorectal (n=1295), lung (n=1383), and prostate (n=1194) cancer cases and their matches there were no significant differences for the year prior to diagnosis but elevated use for all sites in the one-month period before and after diagnosis, with relative risks (RR) from 1.44 (breast) to 4.12 (lung), and up to two years following diagnosis, (RRs of 1.18 [prostate] to 1.86 [lung]). ED use in the year prior to diagnosis was a significant predictor of time to death for colorectal (hazard ratio [HR] 1.06, 95% CI 1.01-1.12) and prostate (HR 1.15, 95% CI 1.05-1.27). Following diagnosis, ED use was significantly associated with time to death for breast (HR 1.20, 95% CI 1.10-1.31) and lung (HR 1.07, 95% CI 1.03-1.11). The pattern of ED utilization varies with the duration of time from diagnosis and the type of cancer. All cancer sites exhibited increased ED use around the time of diagnosis. Cancer patients may benefit from interventions to ensure ready access to emergency services following diagnosis.

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D4 CHRONIC DISEASE MANAGEMENT / GESTION DES MALADIES CHRONIQUES Fontaine F

D4.1 Health Services Utilization and Costs Associated with Co-Morbidity in Older Adults with Dementia

Presented by **LAUREN GRIFFITH** Assistant Professor, McMaster University

To describe health services utilization and associated costs over 5 years among a cohort of community-dwelling older adults with dementia in Ontario according to number of co-morbid chronic conditions. This study is part of a research initiative to develop and evaluate community-based management programs for specific chronic conditions, including dementia. We used administrative health data to identify all community-dwelling adults aged 66 and older with dementia as of April 1, 2008 (baseline). Their use of health services covered under the provincial insurance program was obtained for 5 years following baseline. Physician and home care costs were calculated by multiplying service volumes (total visits or hours) by unit costs; acute care costs were calculated by multiplying per diem rates by total days from visit and length-of-stay data. To explore the extent to which service volumes drove changes in total costs over the 5 years, we held costs constant to 2012 dollars. There were 100,630 adults with dementia (mean age 81, 60.6% female). Only 4% had no co-morbidities; 59.6% had 3 or more. Use of all health services increased with the number of co-morbidities, showing a minimum two-fold greater use in those with 3 or more co-morbidities relative to those with none. Average annual per patient use was stable over follow-up but hospital length-of-stay declined, notably in those without co-morbidities. In 2008, average annual per patient costs tripled with co-morbidity but this gap narrowed by 2012 due to substantial decreases among those with high co-morbidity. Among those with no co-morbidity, home care and specialist visits were the biggest cost drivers; among those with 3 or more, the biggest driver shifted from hospitalization to home care over follow-up. Home care was consistently the biggest cost driver in those with no or low co-morbidities while this shifted over time from acute care to home care among those with 3 or more co-morbidities. This may explain the annual average per patient cost reduction observed in those with high co-morbidity.

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D4.2 Health Services Utilization and Costs Associated with Co-Morbidity in Older Adults with Stroke

Presented by **ANDREA GRUNEIR** Assistant Professor, University of Alberta

To describe health services utilization and associated costs over 5 years among a cohort of community-dwelling older stroke survivors in Ontario according to number of co-morbid chronic conditions. This study is part of a research initiative to develop and evaluate community-based management programs for specific chronic conditions, including stroke. We used administrative health data to identify all community-dwelling stroke survivors aged 66 and older as of April 1, 2008 (baseline). Their use of health services covered under the provincial insurance program was obtained for 5 years following baseline. Physician and home care costs were calculated by multiplying service volumes (total visits or hours) by unit costs; acute care costs were calculated by multiplying per diem rates by total days from visit and length-of-stay data. To explore the extent to which service volumes drove changes in total costs over the 5 years, we held costs constant to 2012 dollars. There were 29,673 stroke survivors at baseline (mean age 78 years, 50.1% female). Nearly all had some co-morbidity and 74.9% had 3 or more. Use of all health services increased with co-morbidity. Average annual physician visits were two-fold greater, emergency department visits four-fold greater, and home care nursing visits five-fold greater in those with 3 or more co-morbidities relative to those with none; hospitalizations were more frequent and longer. Non-stroke related service use consistently drove overall service use, even among those without co-morbidities. Similar trends were observed across the 5 years. Per patient annual costs tripled with increasing co-morbidity but remained stable over time. The biggest cost drivers were hospitalizations, specialist physician visits, and home care but their relative contribution varied by degree of co-morbidity. Co-morbid chronic conditions were strongly associated with greater health service use and costs in this cohort, however, much of this use did not appear to be stroke-related. This demonstrates the importance of incorporating patient-centred, non-stroke oriented care into long-term stroke management programs.

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D4.3 Diabetes risk reduction in primary care: evaluation of the Ontario Primary Care Diabetes Prevention Program

Presented by **MICHAEL HILLMER** Director, Ontario Ministry of Health and Long-Term Care

1) To describe the impact of a primary care-based diabetes prevention program (PCDPP) implemented by the Ontario Ministry of Health and Long-Term Care; and 2) To model the potential impact of scaling up the program to the entire province using a validated population-based diabetes risk prediction tool. The PCDPP is based on international diabetes prevention trials and was implemented in six family health teams (primary care settings) over two years. Participants with pre-diabetes received intensive lifestyle training over 9 – 12 months (in three intervention phases). Body weight, physical activity, and healthy living knowledge were the primary outcomes measured in the program. Weight loss was modeled using multilevel mixed-effects linear regression. Participant demographics and body weights were used to generate a number needed to treat (NNT) value for the PCDPP intervention using the Diabetes Population Risk Tool (DPoRT). In total 1,916 adults were enrolled in the PCDPP from 2011-2012. Participants' average age was 58, and the majority were female (70%). The regression model estimated a decrease in weight of 3.4kgs (or 3.9%) in females (n=959) and 5.1kgs (or 5.1%) in males (n=408) at the 3rd month. Total estimated average weight loss at the 9th month was 5.3% in females and 5.9% in males. Results were similar when only participants over 65 years of age were analyzed. Using DPoRT, we estimate that if 50% of eligible individuals were enrolled in the PCDPP in Ontario, that the NNT would range from 10-20 and the number of diabetes cases averted would range from 14,682 to 29,725 depending on coverage and effectiveness of the program. International studies demonstrate that weight loss can lead to a drastic reduction in diabetes risk. The PCDPP is an effective approach to help adults at high-risk for diabetes reduce their weight in a primary care setting and could have a substantial population impact if offered to more eligible individuals.

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D4.4 Real-world effectiveness of stroke units in Ontario. A matched cohort analysis

Presented by **PETROS PECHLIVANOGLOU** Health Economist/ Post-Doctoral Fellow, THETA Collaborative, University of Toronto

Randomized trials have shown that Stroke Unit (SU) care increases the likelihood of survival and regaining independence compared to General Wards (GW) care. Whether the benefits predicted by trials are seen in real-world stroke care is less well understood. We examined the effectiveness of SU care as delivered in Ontario between 2002 and 2012. Effectiveness of SUs was evaluated using linked Ontario Stroke Audit (OSA) data and standard databases from the Institute for Clinical Evaluative Sciences (ICES). Stroke patients seen at a SU were identified and matched with controls (stroke patients not seen in SUs) using hard matching and propensity scoring. Effectiveness outcomes included death within 7, 30 days, 1 and 2 years post discharge, dependency, institutionalization, acute care length of stay, and stroke-related readmission to hospital within 90 days after initial discharge. Survival analysis methods were used that were reflective of the matched design. 3,743 patients receiving SU care were identified, 1,989 of whom could be matched to controls. The 7-day in-hospital death rate for SUs was 0.6% vs 1.7% for GWs (OR:0.36[0.17,0.70]); 30-day death rate was 2.6% vs 4.7% (OR:0.54[0.38,0.77]); 1-year rate was 11.6% vs. 16.0% (OR:0.67[0.56,0.81]); and 2-year rate was 18.0% vs. 21.7% (OR:0.78[0.67,0.92]). However, the 2-year mortality benefit for SUs was significantly smaller for patients from the most recent cohort (2010) compared to the earlier cohorts (2004, 2008) (p=0.041). The average acute LOS was found to be slightly higher in SUs than in GWs (13.88 days (SD:23.74) in SUs vs. 13.66 days (SD:26.33) in GWs;p<0.05). No significant differences were found in post-discharge dependency, institutionalization and stroke-related readmission. After covariate adjustment, the analysis showed a clear mortality benefit of SUs compared to GWs. Death within 1 and 2 years of discharge was considerably lower in SUs than in GWs which was consistent with findings in the literature. However, the outcomes were sensitive to the inception cohort selection.

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D5 QUALITY, SAFETY & PERFORMANCE MEASUREMENT (PATIENT EXPERIENCE OR CARE) / QUALITÉ, SÉCURITÉ ET MESURE DU RENDEMENT (EXPÉRIENCE DE SOINS DU PATIENT)

Fontaine G

D5.1 Implementing Accountability in Health Care: A National and International Perspective

Presented by **RAISA DEBER** Professor, University of Toronto

To examine strengths and weaknesses of various approaches to accountability being used across Canada and internationally, to determine whether findings of the sub-studies we conducted under our CIHR-funded PHSI (see Healthcare Policy special issue, 2014) apply in other jurisdictions, and to provide policy guidance about best practices. A synthesis of published and grey literature, plus key informant interviews (including with representatives from the former Health Council of Canada, and members of the Pan-Canadian Health Quality Council Collaboration), was used to ascertain how applicable our findings were to what was happening in other Canadian and international jurisdictions. We are determining what approaches to accountability are being used (and how this varies by sub-sectors), what is (and is not) working well, and the lessons learned. Accountability forces providers to be aware of what they are doing; having good data to enable benchmarking and improvement is an important step forward. However, too extensive a reliance on performance measurement risks unintended consequences of marginalizing critical activities. Our respondents confirmed their jurisdictions placed increased emphasis on quality and performance, but primarily for what was easily measured; activities less easy to measure were often ignored. Multiple bodies often asked for similar information, but in slightly different forms, which can be expensive and divert resources from front-line care. Organizations tried to avoid being held accountable for outcomes they didn't control, and to measure success in terms of doing (rather than preventing) things. For example, enabling transitions across care sub-sectors was often omitted from accountability systems. Our respondents confirmed the general findings held in their jurisdiction, but with considerable variation, including across sub-sectors. There was a general consensus that systems should move to streamline the current performance measures and look to introducing better measures that focus on system integration and support the goals of the system.

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D5.2 Measuring Patient Experience with Cancer Symptom Management: A Collaborative Survey Design Process

Presented by **HEIDI AMERNIC** Research Associate, Symptom Management, Cancer Care Ontario

Cancer patients experience a high symptom burden. An evaluation tool was required to assess patient experience with symptom reporting and management, and inform regional and system level quality improvement. Patients were engaged as co-designers of the tool to ensure that indicators reflected patient priorities and person-centred practice. A working group comprised of stakeholders from Ontario's Regional Cancer Centres was created. Participants included clinicians, administrators, researchers, and patient and family advisors. A multi-phase, rigorous, consensus-building process was employed to identify key domains and indicators. Survey questions were then designed and tested through a multi-stage process which included (1) Review of 'sample data' with the working group to assess usefulness of results; (2) Usability testing of survey questions with patient and family advisors using in-depth qualitative interviews; and (3) Revision, refinement, and approval of survey questions by working group members. Five key domains were identified, representing a person-centred approach to symptom management: (1) Patient understanding of the Edmonton Symptom Assessment System (ESAS) which is used to self -report symptoms; (2) Applicability of ESAS to patient symptoms; (3) Barriers to ESAS use; (4) Cancer care team response to patient symptoms; and (5) Patient self-management. Survey questions reflected key domains. Patient usability testing verified domains and ensured that questions were understood consistently by participants. Of primary importance to patients was that the survey not only reflected their experience, but that it was clear, concise, anonymous and voluntary. A written component was also added as patients valued an opportunity to contribute their unique experiences. Open-ended responses will also provide regions with valuable qualitative data. Engagement of researchers with multi-regional clinical, administrative, and patient stakeholders was critical to the survey design process. The process created a measurement tool that gives patients an opportunity to provide meaningful feedback, and also produces actionable data for symptom management quality improvement initiatives at both the regional and system levels.

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D5.3 Electronic health records and effects on patient care: what their users say

Presented by **SUKIRTHA THARMALINGAM** Benefits Realization Leader, Canada Health Infoway

To synthesize evidence on user perceptions of the effect that electronic health records (EHRs) have on patient care. EHRs are secure, integrated views of a person's medical records from all parts of the health care system (e.g. lab results, medication profiles, clinical reports, diagnostic images, and immunization history). Surveys of EHR users in 6 Canadian jurisdictions conducted between 2006 and 2014 (total n=2762) were synthesized using Infoway's Benefit Evaluation Framework. Most surveys employed a common System and User tool to ask users a subset of a core set of evaluation questions. Outcomes have been rated as positive (>50% respondent satisfaction), negative (>50% respondent dissatisfaction), or mixed (other including neutral responses on a five point scale). Considerations while synthesizing findings from individual EHR evaluations include differences in timing from when the EHR system went live, deployment methods, solution attributes, respondent profile, and survey questions. There are over 70,000 active users of EHRs, almost a tenfold increase since 2006. Users tend to report improved patient information as a result – 5 of 5 evaluations asking such questions had positive ratings for availability (56%-87%) and completeness (57%-78%) of information. Likewise, 4 of 4 evaluations had positive ratings for improved information sharing among providers (68-92%). Of 5 evaluations assessing EHRs' effect on clinical decision support, 3 had positive ratings (54%-79%); 2 were neutral. In 3 of 4 surveys, positive ratings were seen for EHRs impact on productivity (56%-77%), quality of care (54-88%) and reducing duplicate tests (51%-90%). Other studies were negative or neutral. Less studied were care coordination and efficiency of accessing and ordering lab tests and diagnostic imaging. Surveys of EHR users in 6 Canadian jurisdictions generally report improved patient information and positive outcomes for patient care, with support tending to rise as users gain experience with EHRs. Variations in satisfaction based on other characteristics (e.g. deployment methods or respondent profile) offer insights for on-going and future implementations.

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D5.4 **Measuring Inpatient Care Experiences**

Presented by **MINGYANG LI** Methodologist, Canadian Institute of Health Information

Patients use a standardized questionnaire to provide feedback about the care they received during their in-hospital stay. The presentation describes three initiatives that support the use of the patient experience data in Canada: Evolution of the patient experience domains using mix-methods; A framework for pan-Canadian measures; and Single and composite measures informing quality improvement and benchmark reporting. Applied mix-methods to revise the patient experience domains and definitions. The literature review, environmental scan and psychometric analyses were conducted to refine the domain names and definitions and develop an initial set of measures. The psychometric analysis was based on the 2013 pilot data (~1215 records) to gather insight on the internal consistency reliability and construct validity of the draft measures at the patient-level. Five jurisdictions, several experts, patient advocates and policy advisors reviewed the synthesis and provided feedback, using the Modified Delphi process. Further consultations were held with system-level decision makers to ensure accuracy, face-validity and reliability. Feedback gathered from consultations informed the refinement of patient experience domains from 12 to three broad categories: continuity of care; communication, participation and partnership; and physical comfort. Concepts important to patients and policy-makers were added in the form of seven sub-domains to guide the development of 10 composite and 8 single measures. Composites measures provide insight on aspects of care processes: coordination of service within hospital, communication with nurses and doctors, staff responsiveness and communication related to transitioning points. Single measures highlight the extent of information patients received about being admitted, getting a hospital bed, and the treatment to help them make informed decisions. The psychometric analysis highlighted high internal consistency reliability (alphas: 0.64-0.93) and acceptable construct validity (correlation: 0.24-0.63). Pan-Canadian patient experience measures will be used for comparative reporting that are intended for use by facilities for quality improvement and by jurisdictions for benchmarking. In 2015-2016, measures will be further validated using field test data.

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D6 PUBLIC HEALTH / SANTÉ PUBLIQUE

Fontaine H

D6.1 **Managing Fearbola - A public relations approach to global health policy**

Presented by **MELODIE YUN-JU SONG** PhD Student, McMaster University

In 2014, Citizenship and Immigration Canada issued temporary VISA bans to incoming travelers from Ebola stricken counties. Outcries from WHO and the Canadian bioethics community deemed the decision xenophobic, unscientific, and a violation of International Health Regulations (Belluz, 2014). This research explores the use of public relations in managing crisis in a global health context. Using a multiple-case embedded design, we explored the existing paradigms of public relations in contemporary practice in Canada. First, the researcher used content analysis to explore Canada's Ebola-related health policy response in the media (i.e., social media, news, archival transcripts, etc). Second, three in-depth interviews were carried out with PR practitioners working in a public institution, a private institution specializing in health policy PR, and an international non-profit organization (i.e., Public Health Ontario, Ward Health, Red Cross Canada). Third, a one-page survey on paradigms of PR approaches were handed out to practitioners working in the above organizations to gauge their perceptions of PR's function in the Ebola crisis. This research verified two propositions. First, by promoting a dialogical communication between Canadians' interests and that of the international global health community, PR professionals in the global context have crucial roles in public health diplomacy, in particular the management functions in relationship building, reputation maintenance, and crisis response in public health. Second, using three popular paradigms in public relations, namely modernism, post-modernism, critical modernism, we identified that each paradigm has its unique contribution to a trans-national and time-space compressed issue in the global agora. Moreover, the case study research allows analytic generalizability of the results to be used to critically appraise past responses towards SARS, H5N1, and other infectious diseases in terms of its appropriateness to relationship management following policy implementation such as a VISA ban. It also highlights PR's contribution to building better diplomatic relations in an increasingly collaborative environment of global private-public partnerships. This exploratory case study research is the first empirical inquiry that looks into a complex sociopolitical phenomena such as Canada's response to Ebola outbreak from a public relations perspective. Health policy makers are encouraged to collaborate with public relations professionals to appraise and evaluate Canada's reputation and relationship in response to global public health crises.

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D6.2 **Factors Associated with Screening Mammography Participation among Canadian Women Aged 40 to 74 in 2012**

Presented by **KARENA VOLESKY** Graduate Student, Carleton University

To report on the participation in screening mammography in Canadian women aged 40 to 74 in the two years preceding their participation in a 2012 national health survey. To determine whether there are differences in screening mammography participation by province/territories, socio-demographic, and lifestyle-related factors. Data from 18,312 women from the cross-sectional 2012 Canadian Community Health Survey were weighted to represent 7.6 million women aged 40 to 74 in the Canadian population. Descriptive statistics were produced, and logistic regression models were fitted to describe associations between participation in screening mammography and the identified factors. Odds ratios derived from these models, as well as their 95% confidence limits, were adjusted for age, marital status, and income. Participation in screening mammography in the two years preceding interviews was highest among women aged 60 to 69 (69.9%), followed by those aged 50 to 59 (62.8%), and those aged 70 to 74 (57.8%). Almost one-third of women aged 40 to 49 participated in screening mammography. Factors most strongly associated with participation in screening mammography, after adjustment for potential confounders, included: having a regular medical doctor (OR = 3.30, CI = 2.90-3.73), having had a Pap test in the last three years (OR = 3.47, CI = 3.18-3.79), and a physical check-up in the last year (OR = 3.06, CI = 2.30-4.08). Aside from age, recent participation in other preventive activities (i.e. Pap testing, and physical check-ups) were the strongest predictors of screening mammography participation among Canadian women aged 40 to 74. This indicates that doctor offices are an appropriate venue to communicate the benefits and harms of screening mammography to women.

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D6.3 **Reverse Gateways? The Impact of Medical Marijuana Legalization on Cigarette Smoking Among American Adults**

Presented by **YUNA KIM** PhD Student, University of North Carolina at Chapel Hill

The reverse gateway theory suggests that some individuals begin cigarette smoking as a result of marijuana use. This study aims to analyse the effect of access to medical marijuana on cigarette use among American adults aged 18 and older, and examine how this effect differs by various demographic groups. Data from the Behavioral Risk Factor Surveillance Survey, Current Population Survey, and Tax Burden on Tobacco from 1994 to 2010 are combined into a pooled cross-sectional dataset. This study employs linear regression analysis (i.e., a difference-in-difference identification strategy that controls for fixed unobserved state characteristics) to estimate the probability that an individual smokes cigarettes as a result of the passage of medical marijuana legalization (MML). Regression models include controls for several observable individual and state-level characteristics. The sample is then stratified into various groups by sex, age, and race to examine whether the effect of MML varies by demographic characteristics. The sample consists of 1,655,578 person-year observations, of which 24% are current smokers. Preliminary results suggest there is no statistically significant relationship between MML and cigarette smoking in the overall sample. However, initial estimates suggest males experience a significant increase in the probability of cigarette smoking due to MML by 1.4 percentage points. Individuals aged 30-39 also experience a statistically significant increase in the probability of cigarette smoking by 1.7 percentage points. Accordingly, the preliminary results indicate that MML significantly increases the probability of cigarette use among males aged 40 and under by 1.7 percentage points. The initial estimates also point to potential differences by race/ethnicity, where the probability of cigarette smoking with MML increases among Latino individuals by 1.9 percentage points. The U.S. experience with medical marijuana sheds light on the potential negative externalities and health consequences associated with increased access to marijuana, namely increased cigarette smoking among adult males. Health policymakers should be cognizant of the potential for marijuana use to lead to cigarette use when implementing legalized marijuana policies.

D6.4 Quality of Life among individuals experience homelessness and mental illness: baseline measurements from the At Home/Chez Soi Project

Presented by **GUDIO POWELL** MSc Student, McGill University

The current study examined the predictors of self-reported quality of life (QoL) at baseline of individuals experiencing homelessness and mental illness (HMI) who were enrolled in a multi-site randomized controlled trial of a housing intervention. The At Home/Chez Soi Project recruited 2,148 HMI individuals across 5 Canadian cities (Vancouver, Winnipeg, Toronto, Montreal and Moncton). Baseline measures of participants' self-reported global QoL were recorded using the general item of Lehman's Quality of Life Index (QOLI ; scored 1, "terrible", to 7, "delighted"). Demographic information, self-reported measures of domain-specific QoL (e.g., family, leisure, etc.), physical health and role limitation (SF-12), psychiatric symptoms (Colorado Symptom Index), substance use problems, and interviewer-assessed health, psychiatric and daily functioning were recorded simultaneously. Bivariate and multivariate regressions were used to identify significant predictors of general quality of life. Bivariate analyses showed a negative association for QoL and being female, older age, and white in comparison to their counterparts. Income and education did not significantly predict QoL. Ratings of lower domain-specific QoL, poorer general and psychiatric health, role and social limitation, and substance use problems also predicted lower general QoL whereas poorer interviewer-assessed thought process/psychosis predicted higher general QoL. Several measures of functioning (employment, previous stable housing and assessed meaningful activity) did not significantly predict QoL. The only predictors maintaining a significant association to lower QoL in multivariate analyses were older age, lower domain-specific QoL, poorer physical health, greater psychiatric symptoms, and poorer assessed mood abnormality, while poorer assessed thought process/psychosis again predicted higher QoL. Domain-specific QoL as predictor of general QoL in HMI individuals supports recent treatment emphases beyond psychopathology. However, our results demonstrate that physical and psychiatric health remain important predictors, while the unexpected direction of psychosis' effect on QoL may reflect limitations of measurement among participants lacking clinical insight.

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D7 PANEL / PRÉSENTATION EN PANEL — Mont Royal

D7 Pan-Canadian Real-world Health Data Network

Réseau pancanadien de données réelles sur la santé

Presented by **MICHAEL SCHULL**, MSc, MD, FRCPC, President and CEO, Institute for Clinical Evaluative Sciences; **ALISON PAPRICA**, PhD, PMP, Director, Strategic Partnerships, Institute for Clinical Evaluative Sciences; **ALAN KATZ**, MBChB, MSc, CCFP, Director, Manitoba Centre for Health Policy; **DAN CHATEAU**, Research Scientist, Manitoba Centre for Health Policy; **KIMBERLYN MCGRAIL**, MPH, PhD, Scientific Advisor and Chair of the Advisory Board, Population Data British Columbia

Canada is home to world-class provincial research centres that bring together health data for tens of millions of Canadians with scientific expertise that transforms those data into knowledge. Policy makers are increasingly seeking to use evidence in policy development and program evaluation. Provincial centres and institutes have responded by using de-identified individual-level data for entire provincial populations in research studies that have contributed to smarter health policy, a stronger and more sustainable health care system, and healthier Canadians. Studies from provincial centres based on real-world administrative data have also been recognized for their high scientific merit and published in leading international peer-reviewed journals. Notwithstanding the success of provincial efforts, imagine what could be accomplished if real-world provincial data and the breadth and depth of provincial expertise were brought together in support of national research and innovation. Across Canada, there is a demand for health researchers and policy makers to move to national-level analyses and comparative research, and to link social services data with health data. The proposed Pan-Canadian Real-world Health Data Network (PRHDN) would bring together diverse data and expertise and unite them through a Health and Social Data Council and National Coordinating Centre. This collaboration would create a platform through which researchers and policymakers from across Canada could use real-world data to study and learn from the natural experiments that occur as different provinces take varying policy and program approaches to health and social services. The PRHDN would be a distributed data network with data staying within provincial boundaries as pan-Canadian analyses are done through both Common Analysis Protocol (CNODES model) and Common Data (mini-Sentinel model) approaches. Importantly, the PRHDN collaboration would provide a mechanism to share expertise, provide pan-Canadian capacity building and create a forum to identify and undertake new studies. Investment in the PRHDN would also position Canada to be among global leaders for data stewardship and cutting edge computational science that maximizes the positive impact of health and social data holdings while maintaining the highest standards for privacy and security. The objectives of the CAHSPR PRHDN panel are (a) to present the proposed purpose and scope of the PRHDN (b) to illustrate how centres such as those in Manitoba, BC and Ontario already have many of building blocks for the PRHDN and (c) to obtain audience input and feedback to refine PRHDN planning. As such, presentations will be brief and approximately half the time will reserved for Q&A and group discussion.

Thursday, May 28, 2015 – 11:00am - 12:15pm SESSION E

Le jeudi 28 mai 2015 – 11 h 00 - 12 h 15 SÉANCE E

E1 HEALTH REFORM II / RÉFORME DES SOINS DE SANTÉ II — Fontaine C

E1.1 Should we pay family physicians to register unattached patients? The unintended consequences of financial incentives in Quebec's access registries

Presented by **JULIE FISET-LANIEL** Research Assistant, McGill University and Direction de santé publique de Montréal

To facilitate access to primary care, especially for vulnerable residents, Quebec initiated centralized access registries for orphan patients (GACO) in 2008. We evaluated the GACOs performance in terms of referrals to family physicians by patient health status and investigated the role played by financial incentives for physicians. In 2011, a GACO policy change introduced a 100$ physician payment for each healthy patient registered and increased the payment for registering vulnerable patients from 104$ to 209$. To evaluate physicians' responses to those changes, we used an economic model of physician behaviour and analyzed data from administrative reports from GACO's information system (2008-2012). Methods: multivariate regressions for clustered panel data. We documented overall trends and regional variations in GACO performance in terms of the number of patients referred and the waiting time to referral. We estimated changes in performance by patient vulnerability status associated with changes in financial incentives. Since 2008, GACOs across the province of Quebec have enrolled and referred more and more patients. The number of physicians who register patients from GACOs has also grown. Meanwhile, the waiting time to referral to a family physician has increased over time. While half of Quebec's health regions have reached a referral benchmark of nearly 80% of GACO-enrolled patients, the other half do not refer more than 65% of enrolled patients. After the GACO reform to physician payments, the average waiting time to referral increased more for vulnerable patients than non-vulnerable patients, a differential increase of more than 100 days. The number of patients referred through the GACOs increased over time for both groups, but it increased less for vulnerable patients than non-vulnerable. The 2011 GACO reform appears to have disadvantaged vulnerable patients in their search for a family physician. Concepts from health economics such as how physicians' utility maximization interacts with their selection of patients can help us understand the unintended consequences of the change to physician financial incentives.

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E1.2 Predictors of Employment and Income Assistance Usage in Early Adulthood across Type and Income Quintile

Presented by **ELIZABETH WALL-WIELER** Student, University of Manitoba

The objective of this study is to examine differences in predictors of early adult (18 – 25) Employment and Income Assistance (EIA) usage across income quintiles of the neighborhood an individual lives at age 18 and the type of EIA (General Assistance, Single Parent or Disability) that an individual receives. Linked administrative data housed at the Manitoba Centre for Health Policy was used to create a birth cohort of all born in Manitoba, Canada between 1979 and 1987 who lived in the province until their 26th birthday, and lived in an urban neighborhood at age 18 (N = 47 588). Predictors include time-invariant birth and family characteristics and time-varying predictors of family instability, mental and physical health. Odds ratios from logistic regression models were used to compare the importance of these predictors across income quintiles, EIA type and income quintiles within each EIA type. Individuals living in low income neighborhoods at age 18 had the greatest prevalence of using EIA in early adulthood; as income quintile increased, the proportion of those using EIA as single parents decreased and the proportion of those using EIA for disability increased. Childhood/adolescent mental health conditions affected the odds of EIA usage in early adulthood most for those living in high income neighborhoods; family instability affected the odds of EIA usage in early adulthood most for those living in low income neighborhoods. Predictors varied across type of EIA usage, but regardless of type, mental health conditions remained the most significant predictor of EIA usage in early adulthood for those living in high income neighborhoods. The use of EIA in early adulthood is a good indicator of inability to transition successfully into adulthood. Differences in predictors seen in these models suggest programs need to take into account the characteristics and developmental trajectories of individuals from different neighborhoods when addressing EIA uptake in early adulthood.

Co-Author(s): Elizabeth Wall-Wieler, University of Manitoba / Leslie Roos, University of Manitoba

E1.3 Partnering to Implement a New School Health Service Delivery Model for Children with Chronic Conditions: Reflections and Lessons Learned

Presented by **WENONAH CAMPBELL** Assistant Professor, McMaster University

Collaborative partnerships are essential to successful transformation of health care services. This presentation will share the experiences and "lessons learned" from key stakeholders involved in a large-scale research study to evaluate a new school-based occupational therapy service delivery model for children with chronic health conditions. Between December 2013 and June 2014, focus groups were held with the 15 occupational therapists who delivered the new service in schools and semi-structured interviews were conducted with stakeholders from the health funding agency, school boards and schools, and members of the research team. Interviews explored stakeholders' perceptions of the implementation of the new occupational therapy service delivery model – what worked well, what didn't, and recommendations for moving forward. Audio files were transcribed verbatim and entered into QSR NVivo 10 ©. Content analysis was conducted by team members to extract macro-level "lessons learned" about implementation from the first year of the study. Lessons learned about implementation included: (1) systematic training and regular opportunities for mentoring and networking are critical to people and systems making and sustaining change; (2) people in organizations need to dedicate time to building relationships and developing strong communication processes; (3) consistent and ongoing communication with all stakeholders at all levels facilitates change; (4) change needs to be gradual – too much at once may overwhelm individuals and systems; and (5) strong leadership is needed at every level within and across organizations. Quotes and examples will be provided to illustrate each of these themes. Strategies recommended by stakeholders with respect to these themes will be shared, along with examples of strategies that have been trialed in the second year. The lessons gleaned from this study offer valuable insight into the challenges and benefits of collaborative partnerships in health services research as well as what factors to consider when embarking on implementation of a new health service delivery model. Implications for health services and policy researchers will be discussed.

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E1.4 Addressing the population health effects of inequitable uptake in colorectal cancer screening in Newfoundland and Labrador

Presented by **MELISSA POWER** Student, Memorial University

Objective: to analyze policy options to address inequitable uptake in colorectal cancer (CRC) screening, focusing on the case of Newfoundland and Labrador (NL). NL implemented a screening program in 2012 to address high CRC incidence, but has not addressed known disparities in screening uptake among rural populations, risking unequal mortality. A rapid knowledge synthesis identified known population-level sociodemographic variables associated with inequitable uptake in CRC screening (PubMed, 2004-2014; Canadian-based articles addressing CRC screening in relation to participation, perceptions or barriers). Successive screening of 215 returned articles yielded 15 articles meeting the criteria for review. Nine articles focused on Ontario's CRC screening program and were used to predict the impact of the NL program. We then conducted a policy analysis for NL using the 3-I framework to assess the ideas, institutions, and interests that should inform policy options to increase accessibility to screening kits with minimal trade-offs. We found that individuals with high income, adequate health literacy and regular visits to a family physician are more likely to be screened for CRC. We proposed two policy options to increase accessibility to screening. The first will allow pharmacists to distribute screening kits under their expanded scope of practice (Pharmacy Act, 2012). This will utilize pharmacists in rural communities and generate support from cancer advocacy groups. The second option is to provide family physicians with financial incentives to distribute screening kits. Both options may increase demand for follow-up colonoscopies but financial incentives will place greater financial burden on the provincial government. The final option is to maintain the status quo pending further measurement of the uptake of the current program in NL. CRC screening participation has been shown to differ between social and economic groups. NL can implement a policy to allow pharmacists to distribute screening kits or provide family physicians with financial incentive. Increased accessibility to this health service is an important element in reducing the burden of disease across Canada.

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E2 ACCESS, EQUITY AND AGING / ACCÈS, ÉQUITÉ ET VIEILLISSEMENT Fontaine D

E2.1 Canada and The Commonwealth Fund 2014 International Health Policy Survey of Older Adults

Presented by **CHRISTINA LAWAND** Program Consultant, Canadian Institute for Health Information

The objectives of this report are to: Tell the Canadian story on the health care experience of people 55 years of age and older and on their perception of the health care system; and highlight how experiences and perceptions vary across Canadian provinces and relative to other countries. The Commonwealth Fund 2014 International Health Policy Survey of older adults reflects patients' experiences from a random sample of the population age 55 and older in 11 countries: Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States. A total of 5,269 respondents were interviewed in Canada on a landline phone between March 4 and May 28, 2014. The data were weighted by age, gender, education, knowledge of the official languages within each province and subsequently by population distribution across Canada. Significance testing was done between provinces and the international average. In 2014, timely access to primary and specialist care remains a significant challenge for older Canadians, especially in the evenings, on weekends or holidays. Every province had significantly longer waits for medical care than the international average. However, once older Canadians accessed the system, they generally reported having positive experiences with their providers that were on par with or better than the international average, even though continuity of care between providers can be improved. More of them also reported their health was very good or excellent. Besides, these older Canadians were more likely than their counterparts in other countries to plan for their end-of-life care wishes. They also spent more time as informal caregivers for a person with an age-related problem than the international average. The survey helps to fill important information gaps about the experience and perception of people age 55 and older. This report shows statistically significant variation across the Canadian provinces and the international average, with mixed results overall.

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E2.2 The health and health services utilization of Canadian Veteran in Ontario: Development and early results of the first population-based resource using provincial and national administrative healthcare data

Presented by **ALYSON MAHAR** PhD Candidate, Queen's University

Longitudinal, population-based data on the health and health services use of Veterans does not exist in Canada. In collaboration with the Canadian Institute for Military and Veteran Health Research, we have identified, for the first time, a population-based method of studying the health of Canadian Veterans who reside in Ontario. This is a retrospective cohort study of Canadian Veterans residing in Ontario who released from the Canadian Armed Forces (CAF) or RCMP between 01/01/1990 and 03/31/2014. The cohort was identified using data captured from Ontario health insurance application forms. This study linked databases at the Institute for Clinical Evaluative Sciences (ICES) and included information on demographics, hospitalizations, emergency department (ED) visits, medical procedures, and physician visits. Validated algorithms were used to identify the prevalence of diseases (e.g. diabetes, cardiovascular disease). Overall and age-stratified descriptive statistics (demographics, disease prevalence, utilization rates) were calculated in the five-year intervals following CAF/RCMP release. The cohort consists of 23,818 Veterans. The majority are male (86%), and the average age entering the CAF or RCMP was 24 years. Half of Veterans served in the CAF or RCMP for ≥20 years, and 26% released at age ≥50 years. Rates of disease increased over time and variation by age at release was evident. For example, rates of diabetes increased from 4.5%-19.7% in the 0-5 and 20-15 years following release, and ranged from 0.6%-6.0% in Veterans <30 years to 8.0-24.8% in Veterans ≥50 years. In the first 5 years, 82.6% visited a family doctor. Utilization was consistent in the <30 to ≥50 age cagetories (78.6%-84.9%). In addition, 40.8% of Veterans visited the ED, ranging from 28.7% (age ≥50) to 61.6% (age<30). The long-term health of Canadian Veterans may be at risk as the result of a career involving unique exposures and requiring a transition to the public healthcare system following release. This new resource will allow purposeful, population-based research to answer questions related to Canadian Veteran health in the future.

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E2.3 Developing a Taxonomy of Health Care Aide Tasks in a Personal Care Home

Presented by **SHAUNA ZINNICK** MSc Graduate Student, University of Manitoba

Using a mixed methods approach, a comprehensive list of health care aide (HCA) tasks will be developed and categorized and the time spent on these tasks will be quantified. This study will also initially describe how HCAs organize their time and patterns of care in the nursing home setting. Focus groups with HCAs will be conducted to build and refine a comprehensive list of HCA tasks. Next, direct observation techniques will used to ensure the comprehensiveness of the list and to determine HCAs' ability to accurately self-report time spent on tasks. Third, the Delphi Technique will be utilized to obtain HCA self-perceived time allocated to each task during a typical day shift. Data pertaining to the general sequence between tasks (e.g., serially without interruption or in parallel with multiple interruptions) as well as the relative importance of the tasks from the perspective of the HCAs will also be collected. Preliminary results based on an extensive literature review, discussions with key nursing home decision-makers and formal focus groups with HCAs indicate that HCA tasks can be categorized into ten primary categories: personal care; assistance with eating; social care; helping with recreational activities; transporting; care planning; paperwork; unit-based tasks; personal time; and other duties. The ten primary categories can then be divided into sub-categories. For example, the primary category of personal care can be divided into seven sub-categories, including: continence and toileting; dressing and grooming; oral care; skin care; preparing the resident for sleep; re-positioning; and non-daily activities (e.g., bathing, nail care). Complete results will be available prior to the conference. This research will fill a void in the literature by describing care activities and patterns performed by HCAs in a nursing home setting. Discussions resulting from this research can begin to shape changing care practice strategies in nursing home environments, enabling HCAs to spend more time on select tasks.

E2.4 Changes in Potentially Inappropriate Drug Prescribing with Nursing Home Admission

Presented by **JULIE ERICKSON** PhD Candidate, University of Manitoba

The purpose of this study was to (i) determine the proportion of nursing home (NH) residents dispensed potentially inappropriate prescription (PIP) medications with new NH admission and (ii) identify the factors associated with the onset and cessation of PIP drug use at this time. A retrospective cohort study with all eligible NHs in Manitoba, Canada. The cohort consisted of older Manitobans (N=6755) newly admitted to NHs from 2001 to 2006. The Beers' Criteria were used to separate PIP drug users into existing users (PIP drug use started prior to NH admission), incidence (new) users, or 'stoppers' by comparing their drug dispensation and NH admission dates. Resident- (e.g., demographics, chronic disease), health care system (e.g., polypharmacy drug use, having multiple prescribers), and facility-level (owner-operator type) risk factors were used to define the unique features of these groups. 15.4% of our cohort (N=1,040) used PIP drugs shortly following NH admission; 54.6% of these residents were incident users, mainly of antidepressants, antihistamines, antimuscinarics, and benzodiazepines. Amongst residents who were non-PIP drug users (N=5,715), 5.8% had stopped using a PIP drug shortly following their NH admission date. Being younger, using higher volumes of drugs, residing in not-for-profit NHs, and urban geography were independently associated with PIP onset; while 'stoppers' were more likely be male, to require higher levels of care, to have waited in hospital for nursing home admission, and to use lower volumes of drugs. This study was the first to quantify PIP with NH admission into incident use, continuing use and cessation. Interventions at a facility level to manage risk factors for PIP onset are indicated. Future research is needed to clarify risk factors for PIP within hospital settings prior to NH admission.

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E3 PRIMARY HEALTHCARE AND NURSING / SOINS DE SANTÉ PRIMAIRES ET SOINS INFIRMIERS

Fontaine E

E3.1 More nurses in primary care, yes! But what for?

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

There is widespread consensus on the fact that nurses—both registered nurses (RNs) and nurse practitioners (NPs)—have an important role to play in improving primary care efficiency, accessibility, and performance. The real question is how. In this presentation, we discuss the findings of a realist review of available evidence. There is limited evidence on optimal team size, team composition, clinical processes, professional roles, and scope of practice for nursing-intensive primary care teams. Using a keyword-based search strategy in MEDLINE, EMBASE and CINHAL, we identified 71 documents. From this core set, we also conducted bi-directional snowball sampling ("being cited in" as well as "having been cited by"). The documents identified were analyzed using a realist review approach. The logic model subjected to review was based on the characteristics of nursing-intensive primary care team structure and care processes that could lead to improved performance. The literature provides limited evidence to inform decisions on optimal structures and processes of primary care teams in which nurses would play a core role. While there are significant data on the contribution of NPs, much less is available on RNs' role and contribution in primary care teams. The literature on disease-centered and program-based clinical nursing roles and on nurses acting as case managers is also richer than that on broader, more holistic primary care nurse contributions. Nevertheless, by integrating the available evidence within a structure–process–results framework, we were able to identify coherent parameters for nursing-intensive primary care teams. We then organized those parameters according to a contingency theory approach, where choosing one parameter limits the realm of the possible in other dimensions. The realist review conducted confirms there is a potential for nursing-intensive primary care models to improve accessibility, efficiency and performance. Some parameters of team structure and care processes were identified and will be discussed. We will conclude by discussing shortcomings in the available evidence on the topic.

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E3.2 Cost-effectiveness of nurse-led collaborative care for patients with diabetes who screen positive for depression in primary care: results from a controlled implementation trial

Presented by **JEFFREY JOHNSON** Professor, University of Alberta

We recently reported a controlled trial evaluating the implementation and effectiveness of nurse-led collaborative care for patients with diabetes and depressive symptoms in primary care settings. We now report the cost-effectiveness of enhanced care (screening, family physician notification, follow-up) vs collaborative care vs "true" usual care (no screening or intervention). We used 12-month data from patients enrolled in a 3-armed controlled trial. From the health care payer perspective, we estimated total costs per patient for implementing collaborative care and enhanced care, and total costs of health care utilization for all patients through linkage with administrative databases. Two measures of effectiveness were used, depression-free days (DFD) based on changes in Patient Health Questionnaire, and quality-adjusted life years (QALY) based on changes in EQ-5D. We generated incremental cost-effectiveness ratios (ICER) based on regression models for differences in costs and effects between study arms over 12 months. Among 227 study patients, average age was 58 years, 55% were female, and average diabetes duration was 12 years. Compared to total 12-month cost per true usual care patient ($5889), the incremental cost for patients in enhanced care was $450/patient vs $1021/patient for collaborative care. Both the enhanced care and collaborative care interventions improved outcomes compared to true usual care, with incremental DFD of 65.9 and 117.6, and incremental QALY of 0.006 and 0.042, respectively. Compared to true usual care, the resulting ICERs were $7/DFD or $76,271/QALY for enhanced care and $9/DFD or $24,368/QALY for collaborative care. Comparing collaborative care with enhanced care yielded ICERs of $11/DFD and $15,861/QALY. In patients with diabetes who screened positive for depressive symptoms in primary care, family physician notification and follow-up (enhanced care) is a clinically effective initial strategy compared with true usual care, but investing more up-front resources in nurse-led collaborative care yields a more cost-effective strategy.

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E3.3 Expérience de soins des patients et pratique infirmière dans les soins de santé primaires

Presented by **ROXANE BORGÈS DA SILVA** Professor, Université de Montréal

Notre étude vise à analyser l'expérience de soins de malades chroniques dans les organisations de soins de santé primaires (OSSP) où les infirmières font du suivi systématique de clientèles en comparaison d'OSSP où les fonctions infirmières consistent principalement en du soutien aux activités médicales Une enquête a été réalisée en 2010 auprès des 606 OSSP des deux régions les plus populeuses du Québec. Un groupe expérimental d'OSSP où les infirmières faisaient du suivi systématique de clientèles et un groupe témoin d'OSSP où elles exerçaient principalement des fonctions de soutien aux activités médicales ont été constitués. Les données d'une enquête populationnelle ont été utilisées pour connaitre l'expérience de soins des patients atteints d'au moins une maladie chronique dans ces régions. Un score de propension a été utilisé pour apparier les deux groupes et les analyses ont été réalisées avec la méthode des probabilités directes Le groupe expérimental était constitué de 104 OSSP dans lesquelles les infirmières faisaient du suivi systématique de clientèles spécifiques. Le groupe témoin était constitué de 59 OSSP dans lesquels les infirmières faisaient du soutien aux activités médicales. Les résultats indiquent que les patients atteints d'au moins une maladie chronique suivis dans les OSSP du groupe expérimental sont proportionnellement plus nombreux, relativement au groupe témoin, à considérer que les services reçus dans leur OSSP leur permettent de mieux comprendre leurs problèmes de santé (76,3% vs 68,0%, p=0,04), de prévenir certains problèmes de santé avant qu'ils ne surviennent (62,0% vs 54,8%, p=0,08), et d'adopter de bonnes habitudes de vie (74,8% vs 64,9%, p=0,04). Les résultats de notre étude montrent une meilleure expérience de soins, au regard des résultats de soins perçus, dans les OSSP où les infirmières font du suivi systématique de clientèles spécifiques. Ils soulignent l'importance d'une utilisation optimale de la contribution des infirmières dans les soins de santé primaires.

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E3.4 La clarification des rôles professionnels dans les équipes de première ligne: une étude de cas multiples

Presented by **ISABELLE BRAULT** Adjunct professor, Université de Montréal

L'objectif de cette communication est de présenter les résultats d'une étude qui a analysé les processus de clarification des rôles professionnels lors de l'implantation d'un nouveau rôle au sein d'une équipe clinique, le rôle d'infirmière praticienne spécialisée en soins première ligne (IPSPL). Cette étude est de type qualitatif et le devis utilisé est l'étude de cas multiples. L'étude repose sur 6 cas d'implantation du rôle d'IPSPL au Québec en milieux urbains et ruraux. Les données proviennent de 34 entrevues semi-structurées avec des informateurs-clés : gestionnaires, infirmières, IPSPL, médecins partenaires et autres professionnels, tous impliqués dans l'implantation du rôle d'IPSPL. Le cadre canadien de compétences en matière d'interprofessionnalisme qui définit les composantes essentielles à la clarification des rôles professionnels compte sept descripteurs de la compétence de la clarification de rôles et a été utilisé pour soutenir l'analyse. La clarification des rôles professionnels est l'une des compétences à développer pour potentialiser la collaboration interprofessionnelle au sein des équipes de première ligne. Les processus associés à la clarification des rôles comprennent l'analyse des besoins des patients et la connaissance du cadre législatif régissant les professions et aussi sur les habiletés individuelles à clarifier son rôle professionnel auprès des membres de l'équipe. Pour ce faire, les professionnels peuvent mobiliser les sept descripteurs de la compétence de clarification (par ex., décrire son propre rôle et celui des autres; reconnaître ses compétences et celles des autres professionnels). Nos données démontrent que les équipes de première ligne performantes, c'est-à-dire qui ont intégré de façon optimale l'IPSPL, ont des rôles clairs et consensuels entre les membres de l'équipe. La clarification des rôles est à la fois un processus organisationnel à développer et une compétence que doit mobiliser chacun des membres des équipes de première ligne pour assurer une collaboration interprofessionnelle efficace. La clarification des rôles est un déterminant clé de la collaboration interprofessionnelle.

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E4 CHRONIC DISEASE MANAGEMENT / GESTION DES MALADIES CHRONIQUES

Fontaine F

E4.1 Improving access to minimally adequate counseling/psychotherapy through financial incentives: Did British Columbia get it right?

Presented by **JOSEPH PUYAT** PhD candidate, UBC School of Population and Public Health

British Columbia introduced financial incentives in January 2008 to reduce the barriers family physicians experience when providing mental health care. In this study, we examined the population-level impact this initiative has had on the provision of minimally adequate publicly-funded counseling/psychotherapy (>4 sessions/year) in patients diagnosed with major depression (MD). We used linked health administrative data from BC to identify individuals who received inpatient or outpatient diagnoses of major depression (MD) from 2005 to 2012. We excluded those who had a 12-month history of mood disorders, and those treated for bipolar I and schizophrenic disorders during a 12-month period before and after the index date of MD diagnosis. In each month, we calculated the proportion of individuals diagnosed with MD (denominator) who received minimally adequate counseling/psychotherapy (numerator). Potential trends over time were determined through plots, stratified by sex and age. Changes due to the policy and over time were confirmed using segmented regression analysis. The proportion who received minimally adequate counseling/psychotherapy varied from 11.3% to 14.8% between January 2005 and March 2012. Sex and age differences were apparent, with men having higher proportions (12.4%-16.7%) than women (10.4%-14.2%) and individuals who were 19 to 25 years of age having higher proportions (10.3%-19.5%) than those who were over 65 years old (9.6%-14.6%). Results of the segmented regression analysis indicate that there was a small and statistically significant increase in the overall proportion of individuals who received minimally adequate counseling/psychotherapy after the introduction of financial incentives in 2008. Plots of the data by sex and age suggest increasing trend for both men and women and a slightly steeper rate of increase in the younger age groups. The proportion of individuals who received minimally adequate counseling/psychotherapy has increased slightly and continues to climb gradually after physician incentives were introduced in 2008. The overall proportion affected by this policy, however, remains very low. Additional measures are therefore needed to ensure more patients benefit from a recommended therapy.

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E4.2 Increasing medication adherence and income assistance access for first-episode psychosis patients through an early intervention service: A PATHS Equity for Children Project

Presented by **DAN CHATEAU** Research Scientist, Manitoba Centre for Health Policy

An early intervention for psychosis program (EPPIS) was established in Winnipeg, MB to treat first-episode psychosis patients. This study examined the patient characteristics of those in treatment, and determined whether the program was effective at increasing access to income assistance, and increasing drug adherence. Data were extracted for clients in the PATHS cohort, held in the Data Repository at the Manitoba Centre for Health Policy (MCHP). These data contain de-identified government administrative records collected by Manitoba, including the province's health services. Clients were identified and linked to their prescription and income assistance records. Treatment and demographic characteristics of clients were derived. Drug adherence and income assistance use was compared to a historical cohort, matched on pattern of diagnosis. Confounders were adjusted through propensity-score weighting, with asymmetrical trimming. Odds ratios (OR) and hazard ratios (HR) for EPPIS participation and their 95% confidence intervals were calculated. 284 treated individuals were identified. Clients were treated for a mean duration of 446.5 days, with a mean of 84.4 visits to program services. Matching produced a sample with 244 clients and 449 controls. EPPIS patients started with a slightly higher rate of income assistance (50% vs. 41.2%) but this difference increased during treatment (67.4% vs.38.7%). Individuals in the program were more likely to have used at least 1 anti-psychotic drug during treatment (OR= 15.05; 95%CI: 10.81 to 20.94) and after treatment (OR= 5.20; 95%CI: 4.50 to 6.02). Patients in EPPIS were also more likely to adhere to their medication during treatment (OR= 4.71; 95%CI: 3.75 to 5.92), and after treatment (OR= 2.54; 95%CI: 2.04 to 3.16) in the program. The program was associated with increased adherence to treatment and improved uptake of income assistance. These programs may reduce health disparity for those with early psychosis. Increased service use is unexpected, but may be caused by emphasis on seeking treatment during acute periods.

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E4.3 Effect of an early intervention for psychosis treatment program on suicidal behaviour and hospital service use: A PATHS Equity for Children Project

Presented by **JASON RANDALL** Doctoral student, Manitoba Centre for Health Policy

There has been a trend towards early intervention for those with a recent onset of psychosis. An early intervention program (EPPIS) was established in Winnipeg, MB to treat individuals with a first-episode of psychosis. This study evaluated whether this treatment program reduced hospital-based treatment. Data were extracted for individuals present in the PATHS cohort, held in the Data Repository at the Manitoba Centre for Health Policy (MCHP). These data contain de-identified government administrative records collected by Manitoba, including data from the province's health services. Clients treated by the early intervention program were matched, using diagnosis, to historical controls. Occurrence of emergency department (ED) visits, inpatient admissions, and suicide attempts/deaths was extracted from the administrative data. Propensity-scores were used to derive inverse-probability of treatment weights to control for confounding and obtain an average treatment effect estimate. Rate ratios (RR), Odds ratios (OR) and hazards ratios (HR) were calculated. A sample of 244 clients was matched to 449 controls. During treatment there were significantly more emergency department visits for the clients (RR= 2.54; 95%CI: 1.56 to 4.58), but no difference in inpatient usage. Post-treatment, both emergency department and inpatient usage were higher in the treated group. However, the difference in ED usage was significantly smaller in the post-treatment phase (RR= 1.76 versus 2.68). Suicidal behavior was significantly less frequent among clients, both during treatment ($p<0.0001$) and after (HR= 0.39; 95% CI: 0.17 to 0.94). The higher rates of service use by clients differ from other studies on early intervention programs. This may be due to an emphasis on bringing patients into treatment during acute episodes. This program resulted in a significant reduction in the occurrence of serious suicide attempts, with clinically important implications.

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E4.4 Justice involvement of homeless men and women with mental illnesses: can self-report be regarded as reliable evidence?

Presented by **ASHLEY J. LEMIEUX** PhD Student, McGill University and Douglas Mental Health University Institute

Given their high rates of justice involvement, efficiently assessing justice service use for homeless individuals with mental illnesses is essential when evaluating the effects of intervention programs. This study aims to assess reliability of self-reported court appearances through comparisons with administrative data, and identify participant characteristics that affect self-report reliability. Data on 468 homeless adults with mental illnesses were collected as part of the At Home/Chez Soi (Montreal site) randomized controlled trial of Housing First. Self-report data was collected using a health, social and justice service use questionnaire. Administrative data was collected through provincial and municipal court databases. Agreement was analyzed using percentage agreement, as well as Kappa and intra-class correlation coefficients. Associations between participant characteristics and agreement between self-report and administrative data were explored using multinomial logistic regressions. Agreement between self-report and administrative data ranged from 77.04% to 84.37% ($\kappa = .59 - .72$; ICC = .68). Several factors were found to be associated with discrepancies between self-reported court appearances and information found in official records: younger male aboriginal participants with poorer cognitive and community function, who were perceived by interviewers to have difficulty and little interest during the interview were more likely to misreport. Furthermore, the presence of psychiatric disorders, such as PTDS and psychosis, as well as alcohol and drug use or dependence was also linked to misreporting. Finally, participants who were homeless at a younger age and who committed their first criminal offence as a minor were also more likely to misreport details regarding their court appearances. Most participants accurately reported justice involvement, suggesting that self-report can be considered reliable in future studies among this population. Understanding what factors influence validity of self-reported accounts for homeless individuals with mental illnesses will aid researchers in planning their methodological approaches to obtain reliable information from samples with multiple vulnerabilities.

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E5 HEALTH ECONOMICS / ECONOMIE DE LA SANTÉ

Fontaine G

E5.1 Cancer Formulary Recommendations in Canada - A Revealed Preferences Analysis

Presented by **MIN HU** Associate Professor, Dalhousie University

The pan-Canadian Oncology Drug Review (pCODR) recommends the addition of new cancer drugs to provincial formularies. Each pCODR review considers four dimensions of value: clinical benefit, economic evaluations, patient-based values, and adoption feasibility. Our study objective is to assess the extent to which each of these dimensions influences the recommendations. We quantified the four dimensions on the basis of reports on pCODR deliberations up to June 2014 (n=42). Variables included relative and absolute survival gain, incremental cost-effectiveness ratio (ICER), and flags indicating unmet need or an oral drug. Reports did not provide consistent criteria for how patient-based values and adoption feasibility were assessed, and as such these concepts remain vague and elusive. Using a revealed preferences framework, we used a multinomial logit model to assess the influence of these variables on the decision to approve or reject a drug, relative to a conditional approval. The strongest predictor of the pCODR recommendation was the economic evaluation. An ICER lower than $150,000 significantly increased the likelihood of a drug being approved across several model specifications. Conditional approvals were often issued when the price (or ICER) were perceived as too high. Addressing an unmet need also appeared to increase the likelihood of approval, although this factor did not achieve conventional significance. No other factors appeared statistically significant. The power of the analysis was limited, as there was minimal variability among a number of the variables, and the sample size was small. The analysis of the pCODR reports reveals that the committee has a preference for more cost-effective drugs. The concepts of patient-values and feasibility are recognized as important factors to consider, but their full and consistent consideration is hampered by the lack of well-defined indicators.

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E5.2 Impact des incitations financières sur l'accès aux services et la qualité des soins : cas du programme d'accès à la chirurgie au Québec

Presented by **NIZAR GHALI** Économiste de la santé, Ministère de la santé et services sociaux du Québec

Nous cherchons à mesurer l'impact d'une politique financière incitative pour les hôpitaux (un financement à l'activité) sur l'évolution de l'accès aux services ainsi que la qualité des soins offerts. Cette analyse prend en compte le contexte de médecins qui sont des travailleurs autonomes et non pas des salariés. Dans le cadre d'un programme de financement à l'activité instauré au Québec depuis 2004, nous prenons l'exemple des délais d'attente et des durées de séjour de certaines chirurgies. Nous estimons le hasard de passer d'un état d'attente à un état d'opération et d'un état d'hospitalisation à un état de sortie de l'hôpital. En se basant sur une approche de différence en différence, nous utilisons un modèle de durée à hasards proportionnels avec hétérogénéité non observée. Notre groupe de contrôle est basée sur les données similaires d'une autre province canadienne. Les données portent sur un échantillon de huit ans. Nous démontrons que chaque 1 M$ injecté dans le financement des hôpitaux réduit le délai d'attente moyen de 9.8 jours pour la chirurgie du genou et de 5 jours pour la chirurgie de la hanche. De l'autre côté, la durée de séjour moyenne diminue de 1.14 jours et de 1.18 jours respectivement pour la chirurgie du genou et de la hanche. Cette expérience montre que la mise en place d'une incitation financière positive permanente pour un hôpital apporte des résultats positifs plus soutenables sur les délais d'attente et les durées de séjour, et ce même dans le contexte où le médecin est un travailleur autonome.

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E5.3 Estimating Cost-Effectiveness of Cervical Cancer Control Policies Using a National-Level Microsimulation Model

Presented by **SARAH COSTA** Health Economist, BC Cancer Agency; The Canadian Centre for Applied Research in Cancer Control

Cervical cancer is becoming understood as a disease that is largely preventable. Decision-makers face some uncertainty about which alternatives deliver best value for money. We partnered with the Canadian Partnership Against Cancer (CPAC) to evaluate the cost-effectiveness of potential cervical cancer control policies in the province of British Columbia (BC). We used the HPV/cervical cancer module of CPAC's Cancer Risk Management Model (CRMM) to test four scenario arms. Data from the BC Cancer Agency's Cervical Cancer Screening Program was used to calibrate the model to a provincial context ("base case"). The scenarios that were tested include: method of screening (i.e., HPV test compared to Pap testing); time interval between screens; screening participation rate; and population prevalence of HPV. Each scenario was analyzed in terms of its impact on the incremental cost-effectiveness ratio (ICER). Sensitivity analyses were conducted for each scenario. A 3% discount rate was applied to costs and outcomes. The current screening environment for cervical cancer in British Columbia was reflected in the base case. A total of 10 scenarios were analyzed using the CRMM over a 20-year time period (2013-2033). Compared to the base case, the most dominant scenarios – in terms of cost savings and incremental person-years gained – were found to be the use of the HPV test as the primary screening method in place of standard cytology testing, and increasing the starting age for screening from 21 to 30 years. During the course of this exercise, a number of opportunities were identified that may contribute to the model's functionality and accessibility for broader audiences, including calibration of base inputs to reflect province-specific settings. Population-level modeling approaches like the CRMM are becoming increasingly valuable for planning integrated and coherent cancer control strategies. The CRMM and HPV platforms allow for a broad exploration of many policy-relevant factors of cervical cancer control programs, and provide an informative launching point for further discussion and focused research.

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E5.4 Using micro-simulation for projecting health care costs for neurological conditions in Canada

Presented by **PHILIPPE FINÈS** Senior Analyst, Statistics Canada

Costs related to health care services were estimated for 2011 and projected to 2031 for 7 Neurological conditions (NC) in Canada using the POHEM model of microsimulation. The 7 priority NCs were: Alzheimer's; Cerebral palsy; Epilepsy; Multiple Sclerosis; Parkinson's disease; Traumatic brain injuries; and Traumatic spinal cord injuries. Using results from several databases and surveys, parameters were identified and implemented into our microsimulation model – POHEM-Neuro – to produce a picture of the Canadian population in 2011 with and without each of the 7 priority NCs. Using status quo hypotheses (constant incidence rates and constant costs over time) we projected the estimates of 2011 to produce estimates for the next 20 years (up to 2031). The direct health care cost categories included: physician visits, pharmaceutical costs, hospitalizations, home care, rehabilitation hospitals, long-term care institutions, and assistive devices. Costs were estimated from administrative data in Ontario and British Columbia. Based on our microsimulation projections, total additional costs due to Alzheimer's and other dementias (compared to a population without any NC) are expected to rise from $6.7 billion in 2011 to $13.3 billion in 2031. During the same period, the prevalence rate is expected to rise from 2.0% in 2011 to 3.1% in 2031. Also, during that period, among persons with this NC and aged 85+, 53% of costs were attributed to long-term care institutions, with total average costs estimated as $30,000/yr; whereas for persons of same age group without any NC, highest costs were attributable to hospitalizations (41%), with total costs averaging $9,000/yr. Specific results were obtained for each of the other 6 priority NCs and will also be presented. For the first time, POHEM-Neuro permitted the calculation of estimates of prevalence and direct health care costs prospectively for the next 20 years, for each of 7 priority NCs. While the present model used status quo assumptions, future models can be expanded to include time-varying parameters.

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E6 HEALTH HUMAN RESOURCES / RESSOURCES HUMAINES EN SANTÉ

Fontaine H

E6.1 2014 work locations of Memorial University medical graduates

Presented by **MARIA MATHEWS** Professor, Memorial University of Newfoundland

We examined the 2014 work locations of Memorial University of Newfoundland (MUN) medical graduates to identify the predictors of working in 1) Canada, 2) Newfoundland and Labrador (NL), 3) rural Canada, and 4) rural NL. We update and compare outcomes to a 2004 study. We linked data from graduating class lists, the alumni and post-graduate databases with Scott's Medical database. Our sample included all MUN graduates from the class of 1973 to 2008, excluding those who died, retired, or were in the military or sponsored by the Malaysian government. We used multiple logistic regression to identify predictors for each outcome and compared the outcomes of two cohorts of newly graduated physicians (graduates from the 1990s and graduates from the 2000s) in their first years of practice. In 2014, 88.3% of MUN graduates were working in Canada, 34.2% in NL, 11.7% in rural Canada, 4.9% in rural NL. Those with rural backgrounds; Newfoundlanders; graduates from the 1980s, 1990s, and 2000s were more likely to work in Canada. Those with rural backgrounds, Newfoundlanders , 2000s graduates, MUN post-graduate residents were more likely to work in NL. Those with rural backgrounds and family physicians were more likely to work in rural Canada. Those with rural backgrounds; Newfoundlanders, MUN post-graduate residents, and family physicians were more likely to work in rural NL. Rural practice among recent graduates has fallen to almost half the rates of new graduates from a decade ago. Although MUN graduates comprise a growing proportion of the NL physician workforce, they form only one-fifth of the rural physician workforce in NL. The study highlighta the downstream impact of changes in medical student characteristics in NL

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E6.2 Geriatric care planning in home care: time for change?

Presented by **JUSTINE GIOSA** Research Associate, Saint Elizabeth

The interRAI Home Care Assessment (RAI-HC) is mandated for allocation of government funded home care services in Ontario; however, the specific assessment and information sharing practices of frontline providers, particularly in the provision of geriatric care, are not standardized. This study investigated geriatric care planning in Ontario home care. A literature review, environmental scan and expert interviews (N=7) led to the development of the Geriatric Care Assessment Practices (G-CAP) survey. The G-CAP survey is an online, self-report tool that explores frontline home care provider practices in assessing nine domains of geriatric care, including the use of standardized and non-standardized methods, attitudes towards assessment, knowledge and perceptions of the RAI-HC and experiences with interdisciplinary collaboration, including person-centred goal setting and information sharing. The survey was pilot tested with nurses, occupational therapists and physiotherapists from four geographic areas in a single home care provider agency in Ontario at two time points (N T1=27; N T2= 20). Survey participants use their own clinical observation and interview skills far more often than any standardized tools for geriatric assessment. Just over half of the participants had heard of the RAI-HC; however, on average, they never use it. While participants agreed they could use client information collected by other health care professionals, they also agreed they must conduct client assessments themselves in order to provide care and only sometimes share and rarely receive assessment information from other health care providers. Pearson's correlation coefficients (M r= 0.39) and t-test statistics (M t= 3.0; M p= 0.01) confirmed expected relationships between survey items. Intraclass correlation coefficients (M ICC= 0.62) and weighted kappa coefficients (M kappa= 0.60) indicate acceptable test-retest reliability for the G-CAP survey in this population. Pilot data indicates disconnect between service allocation at the system level and frontline assessment in geriatric home care. Further research is required to develop policies and practices that optimize all relevant sources of client information for a more seamless geriatric care planning approach that transcends discipline, agency and system boundaries.

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E6.3 Generalist, Specialist, Subspecialist: How is the physician workforce changing and what is driving the change?

Presented by **STEVE SLADE** Director, Health Systems and Policy, Royal College of Physicians and Surgeons of Canada

Diverse healthcare needs call for a medical workforce that balances generalists and specialists. Multiple data sources are used to analyze medical workforce specialization. Emerging pedagogical initiatives are reviewed as potential enablers/deterrents of subspecialization. The overarching objective is to evaluate the relationship between pedagogical change, physician workforce composition and system responsiveness to healthcare needs. Multiple pan-Canadian data sources are used to present a comprehensive picture of how the physician workforce is changing with respect to generalist-specialist-subspecialist composition. Postgraduate medical training data is used to gauge increases/decreases in the numbers and types of physicians being trained over the last two decades. Data from regulatory authorities and membership organizations is used to measure how the composition of the licensed physician workforce is changing. Self-reported survey data provides further insight on physician's practice scope. Pedagogical and credentialing initiatives of Canada's certifying Colleges are reviewed as potential drivers/deterrents of workforce subspecialization. Canada's medical Colleges have increased the number of specialties and subspecialties they recognize. At the same time they have added new certification routes that recognize physicians with special interests and focused practices. While there has been relatively little change in the allocation of entry level residency positions across broad specialties, the proportion of trainees who go on to subspecialize has increased significantly since 1995. Overall, there has been a 42% increase in the proportion of medical specialists who subspecialize and a 149% increase in the proportion of family medicine residents who subspecialize. More specifically, 17% of family doctors focus on emergency medicine, 18% focus on hospital medicine and at least 1 in 10 focus their practices on areas such as maternity and newborn, mental health and palliative care. Strong evidence suggests that physicians are increasingly likely to subspecialize and otherwise narrow their scope of practice. Initiatives like Certificates of Added Competence and diploma programs could support more specialized, focused practice. At the same time, initiatives like Triple C and CanMEDS 2015 could bolster generalist practice. Pedagogical change must continue to strive toward the best care and the best health for all.

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E6.4 Trends among specialist physician unemployment in Canada: gaining understanding of this new phenomenon

Presented by **ARUN SHRICHAND** Manager, Health Systems and Policy, Royal College of Physicians and Surgeons of Canada

Evidence persists of employment challenges among some newly certified medical specialists in Canada. This multi-objective study seeks, among others, to identify existence of any trends among disciplines where employment challenges are reported. Quantitative data has been collected since 2011 through an online survey administered to every new Royal College specialty and subspecialty certificant (year 2011 N=2002, year 2012 N=2231, year 2013 N=2346 with response rates of 33%, and 32% and 40% respectively; 2014 data collection for subspecialists ongoing). The survey instrument has been designed to identify medical specialties and subspecialties for which employment problems among new certificants problems exist and the reasons why job seekers report they can't find work. Three years of data collection reveals consistent trends among the percentage of newly certified specialists and subspecialists reporting they have not found employment and the disciplines where employment challenges are most prevalent. Overall, between 14% and 18% of new certificants report not having secured a job posting 6-24 weeks after confirmation of certification in their field (2011: 14%; 2012: 18%; 2013: 18%). Most impacted disciplines continue to be those which are resource intensive: cardiac surgery, hematological pathology, nuclear medicine, neurosurgery, orthopedic surgery, otolaryngology, obstetrics and gynecology, radiation oncology and urology (range of "no job placement" reported over time among these is 20%-66%). Interestingly, collected data shows one marked change among anesthesiologists reporting employment challenges (down to 2% in 2014 from 20% in 2011). Data collection to date has identified patterns related to disciplines experiencing employment challenges. Ongoing data collection will validate these patterns, changes over time and the length of time to secure employment. Such information will help inform future specialists and subspecialists, and medical workforce planning efforts.

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E7 PANEL / PRÉSENTATION EN PANEL — Mont Royal

E7 Creating Capacity in Support of System Transformation in Ontario

Renforcement des capacités à l'appui de la transformation du système en Ontario

Presented by: **G. ROSS BAKER**, PhD is Professor of Health Policy, Management and Evaluation and Director of the MSc Program in Quality Improvement and Patient Safety at the University of Toronto; **LEE FAIRCLOUGH**, MHSc is Vice-President, Quality Improvement, Health Quality Ontario; **MICHAEL HILLMER**, PhD is Director of Planning, Research and Analysis Branch, Ontario Ministry of Health and Long-Term Care; and Adjunct Lecturer, Institute of Health Policy, Management and Evaluation, University of Toronto; **TIM JACKSON**, MD, MPH, FRCSC is Provincial Surgical Lead for NSQIP-Ontario; General Surgeon, University Health Network; and Assistant Professor of Surgery, University of Toronto

Quality improvement and research mobilization are key enablers for improving health systems. Speakers in this session will describe innovative programs to drive system transformation and examine their impacts on healthcare leaders, and assess how such programs contribute to the capability of healthcare systems to improve healthcare performance. New health system transformation initiatives aim to improve integration between sectors, implement evidence-based care protocols and reform funding. These initiatives rely upon greater skills supporting innovation, quality improvement, and the translation of evidence-based protocols to practice. Enablers at the macro, meso, and micro levels of the healthcare system are crucial to ensuring the capacity, evidence, and skills exist to improve the healthcare system. Panellists from Ontario representing academic and program/policy planning perspectives will discuss innovative strategies and programs. Such programs need to be aligned with system priorities, scaled to fit needs and spread across systems. At the micro level, Dr. Ross Baker will describe the impact of the IDEAS (Improving and Driving Excellence Across Sectors) program in Ontario which provides quality improvement skills to frontline healthcare teams to improve cross-sector and organizational care delivery. IDEAS has been offered to more than 60 teams from across Ontario who seek to improve integration of the care for complex patients and other health system goals. From a perspective including both the micro level (as a surgeon) and the meso level (as the lead for a provincial quality improvement effort), Dr. Tim Jackson will describe the National Surgical Quality Improvement Program (NSQIP), an internationally recognized initiative to measure and improve the quality of surgical care that Health Quality Ontario (HQO) has brought to Ontario. He will highlight the importance of engaging clinicians in change, how approaches such as the NSQIP that use audit and feedback in addition to quality improvement interventions have proven successful, and potential opportunities for a Canada-wide collaborative. At the meso level, Lee Fairclough, Vice-President at HQO will describe a variety of innovative capacity building efforts in Ontario to enable providers across the system to contribute to the broader policy goals of system transformation. She will describe the strategic approach taken by HQO to develop capacity for system transformation in Ontario. At the macro level, Dr. Michael Hillmer will describe the approaches employed by the Ontario Ministry of Health and Long-Term Care to stimulate an innovative research environment that promotes capacity, collaboration and policy-relevant evidence. Greater capability to address system priorities is critical to improving performance. Ontario has developed many innovative programs to support capacity development. These programs need to be aligned with system priorities and scaled-up to enable providers to reshape policies and services. On-going evaluation of these programs will inform their further development.

Thursday, May 28, 2015 – 1:30pm - 2:45pm SESSION F

Le jeudi 28 mai 2015 – 13 h 30 – 14 h 45 SÉANCE F

F1 MATERNAL CHILD HEALTH & MENTAL HEALTH / SANTÉ MATERNELLE ET INFANTILE ET SANTÉ MENTALE — Fontaine C

F1.1 Variability in postpartum mental health service use among immigrant women in Ontario

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

Immigrant women in Canada are at higher risk for postpartum mental disorders, compared to their Canadian-born counterparts. Overall, they are less likely to seek out mental health care from physicians for this condition. How postpartum mental health service use patterns differ within different groups of immigrant women is largely unknown. We conducted a population-based cohort study using linked Ontario health administrative and Citizenship and Immigration Canada data. We identified Ontario female immigrants to Canada between 1985-2010 who delivered a live born infant between 2008 and 2012. We measured postpartum mental health service use (physician visits, emergency department use and hospitalization) by 1) region of origin, 2) time since immigration and 3) refugee status. Odds ratios (aOR) and 95% confidence intervals (CI) are adjusted for maternal age, parity, neighbourhood income quintile, urban residence, history of mental disorder, multiple gestation, type of prenatal care, maternal medical morbidity and severe newborn morbidity. There were 123, 231 immigrant women who gave birth during the study period, representing 27% of new mothers in Ontario. About 14% of immigrant mothers used postpartum mental health services overall, with 13.6% using outpatient physician services, 0.6% emergency services and 0.2% psychiatric hospitalization. Women from Latin America and the Caribbean were most likely to use services (17.3%), and women from East Asia and the Pacific were least likely (10.4%). Immigrant women living in Canada for more than 10 years (16.1%) and for 5-9 years (13.8%) were more likely to use services than women living in Canada less than 5 years (12.7%, aORs 1.21, 1.27-1.37 and 1.10, 1.06-1.15). Refugee women were more likely to use services (16.8%) compared to non-refugees (13.7%, aOR 1.25, 1.20-1.31). There is variability in postpartum mental health service use among immigrant women by region of origin, by time since immigration and by refugee status. This heterogeneity may have implications for the development of active case finding and treatment engagement initiatives for postpartum mental disorder among immigrant women.

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F1.2 Marginalization and access to community mental health services prior to psychiatric emergency visits in postpartum women in Ontario

Presented by **LUCY BARKER** Psychiatry Resident, University of Toronto

To determine whether marginalization is associated with potentially preventable psychiatric emergency department (ED) visits for women in the first year after childbirth. We used Ontario population-based health administrative data (2006 to 2012) to conduct a nested case-control study of women who had a psychiatric ED visit within the first year after childbirth. We identified potentially preventable psychiatric ED visits as those that were the woman's first mental health contact since delivery (cases), compared to those who had accessed community mental health services prior to the ED visit (controls). Marginalization was compared between the two groups using the Ontario Marginalization Index (ON-Marg), a validated geographically-derived index based on material deprivation (our primary dimension of interest), residential instability, ethnic concentration, and dependency. There were 8,728 women with a psychiatric ED visit in the first year after childbirth, of whom 5271 (65.5%) were cases. Cases were more likely than controls to be in the two most marginalized quintiles (Q) for material deprivation, and this was more pronounced after adjustment for age, parity, prior psychiatric history, and having a GP involved in antenatal care (adjusted odds ratio (AOR) 1.21, 95% confidence interval (CI) 1.04-1.41 for Q4; aOR 1.25, 95% CI 1.09-1.44 for Q5). For ethnic concentration, cases were less likely to be in marginalized groups (aOR 0.73, 95% CI 0.63-0.86 for Q4; aOR 0.8, 95% CI 0.69-0.93 for Q5). No association was found for the dependency or residential instability dimensions. Two-thirds of postpartum women do not access community mental health services prior to presenting in the ED for psychiatric reasons and material deprivation is a barrier. Further research on access to postpartum psychiatric services for marginalized women could inform policy and prevent unnecessary ED visits and accompanying negative outcomes.

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F1.3 Family-Centered Services versus Family-Centered Systems: The Relationship Between Autism Services and Mothers' Wellbeing

Presented by **SANDRA HODGETTS** Assistant Professor, University of Alberta

Mothers of children with Autism Spectrum Disorder (ASD) experience increased stress and depression, and decreased parenting satisfaction, parenting confidence, family quality of life and social support compared to others. Family-centered services should enhance family outcomes. We investigated the relationship between current services and wellbeing for mothers' of children with ASD. Mothers with a child with ASD completed a comprehensive questionnaire addressing child/family demographics, details about supports and services received, continuity of care over time and across sectors (Alberta Continuity of Services Scale for Mental Health, Adair et al., 2001), family-centeredness of services (Measure of Processes of Care-20; King et al., 2004), and parent wellbeing (Perceived Stress Scale; Cohen et al, 1983); Parenting Sense of Competence Scale; Gibaud-Wallston & Wandersman, 1978 as cited in Johnston & Mash, 1989). Linear regression analysis, with predictors entered in three blocks (service, maternal-household, and child variables) was employed to determine predictors of maternal wellbeing. We obtained responses from 139 mothers across a diverse range of child, parent, family and service demographics. When the influences of other variables were controlled, discontinuity of services and multiplicity of professionals (involvement with more professionals), but not frequency of contact with any one professional or perceptions of family-centered services, predicted decreased maternal wellbeing. Increased household income and having an older child also predicted increased maternal wellbeing, although adding mother/child/household characteristics to the model did not significantly improve (power to predict) the model. Systemic, not practitioner-level or child (e.g., intellectual and language ability), variables predicted maternal wellbeing. Findings reinforce the negative influence of systems-level challenges, especially fragmentation of services, on maternal wellbeing, despite positive front-line services and differences in child and family characteristics.

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F1.4 Labour and Delivery Outcomes Among Ontario Women with Intellectual and Developmental Disabilities

Presented by **HILARY BROWN** Post-Doctoral Fellow, Women's College Research Institute

Women with intellectual and developmental disabilities (IDD) have increased risks for hypertensive and thromboembolic complications of pregnancy. Our objectives were to: (1) compare the risks for poor labour and delivery outcomes among women with and without IDD and (2) determine whether pregnancy complications mediate these risks. We conducted a population-based cohort study using linked Ontario (Canada) health and social services administrative data. We identified obstetrical deliveries to women with (N=3,932) and without (N=382,774) IDD in fiscal years 2002 to 2011. Modified Poisson regression was used to estimate the adjusted relative risks (aRR) and 95% confidence intervals (CI) for labour induction, operative vaginal delivery, and caesarean section. We controlled for maternal age and parity and additional confounders that changed unadjusted associations by more than 5%. We used generalized estimating equations to test the significance of the indirect effect of IDD (through pregnancy complications) on delivery outcomes. Compared to women without IDD, women with IDD were at increased risk for labour induction (24.6% vs. 21.5%; aRR=1.13, 95% CI 1.06-1.20). They were not at increased risk for operative vaginal delivery (aRR=0.98, 95% CI 0.87-1.08) or caesarean section (aRR=1.07, 95% CI 1.00-1.13). Although women with IDD had higher rates of pregnancy complications (including preeclampsia/eclampsia, venous thromboembolism, hemorrhage, severe obstetric morbidity, and systemic maternal complications) than women without IDD, these pregnancy complications did not explain any of the increased risk for labour induction among women with IDD. Women with IDD have slightly increased risk for labour induction which is not explained by their high rates of pregnancy complications. It is possible that non-medical issues such as maternal difficulties with communication or comprehension may influence provider decisions regarding the timing of labour and delivery among women with IDD.

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F2 KNOWLEDGE TRANSLATION AND EXCHANGE / TRADUCTION ET ÉCHANGE DE CONNAISSANCES Fontaine D

F2.1 La participation de patients à des comités d'amélioration continue de la qualité: leur point de vue sur leurs apports et leurs défis

Presented by **MARIE-PASCALE POMEY** Assistant Professor, University of Montréal

Cette recherche porte sur la perception de patients de leur participation à des comités d'amélioration de la qualité dans des établissements de santé et de services sociaux québécois. Au Québec, depuis 2011 la Direction collaboration et partenariat patient de la faculté de médecine de l'Université de Montréal a permis l'implantation de comités d'amélioration continue (CAC) de la qualité intégrant des patients au sein de 26 équipes provenant de 16 établissements de santé du Québec. Ces CAC étaient composés de 8 à 10 personnes dont deux patients. Vingt de ces patients ont participé à des entrevues de 30 à 60 minutes pour mettre en évidence : 1) leur apport aux équipes ; 2) leur apprentissage ; 3) les défis de leur participation ; 4) les leçons apprises. Ces patients apportent une vision structurée et réfléchie de leur expérience avec la maladie et de leur parcours de soins., sans revendication. Ils se sentent privilégiés d'avoir pu partager leurs savoirs expérientiels, en complémentarité avec l'expertise des intervenants. Le principal défi soulevé était lié à l'agenda des réunions qui se tenaient le plus souvent sur les heures de travail des intervenants. Ils ont manifesté leur frustration face à la lenteur des prises de décision. Leur participation a permis de transformer un drame personnel engendré par leur maladie par un apport constructif à l'amélioration des services de santé. Ils ont modifié leur relation avec les intervenants à qui ils ont pu témoigner leur reconnaissance et ils ont mieux compris la complexité de l'organisation des soins. Cette étude est l'une des premières à s'intéresser à la perception de patients à leur participation à des comités d'amélioration de la qualité. Elle met en évidence l'apport de leur participation au niveau personnel et de l'équipe. Les patients se sentent privilégiés d'être impliqués et tous souhaitent poursuivre leur participation.

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F2.2 Social Media's Impact on Getting Health Research into the Hands of Those Who Can Use It: The CADTH Health Technology Assessment (HTA) experience

Presented by **EFTYHIA HELIS** Knowledge Mobilization Officer, Canadian Agency for Drugs and Technologies in Health

Social media has gained a prominent place in health care as a way for real-time sharing, communication and discussion of topical issues. This presentation will demonstrate the way CADTH is using social media platforms to enhance dissemination and application of HTA research results, improve communication with decision-makers, and engage patient groups. By taking advantage of cost-effective tools such as Twitter, LinkedIn, SlideShare, Youtube, and others, CADTH is using social media to support improved communications of research findings, transparency, knowledge mobilization strategies and patient engagement. Since launching our social media efforts in 2012, CADTH has effectively harnessed social media to disseminate our HTA work beyond traditional audiences, promote the value of HTA to a diverse group of stakeholders and enhance our knowledge translation and mobilization efforts. By closely monitoring outcomes, we have consistently seen increased engagement from key audiences, including other HTA producers, pharmacists, physicians, professional societies, and patient groups – from Canada and around the globe. By interacting with HTA users online, we have quickly identified trends, responded to decision-maker and patient needs, disseminated evidence in a highly targeted manner, and enhanced strategies for our Knowledge Mobilization programs. Health researchers and users of health research shouldn't underestimate the ability of social media to reshape the way research is accessed and understood by decision-makers at all levels of the health system. CADTH has successfully used this technology to decrease barriers to HTA research, expand our network, and increase interaction among our stakeholders.

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F2.3 Applied Knowledge Mobilization to Improve Health and Healthcare – The CADTH Experience

Presented by **EFTYHIA HELIS** Knowledge Mobilization Officer, Canadian Agency for Drugs and Technologies in Health

Too often, rigorous and high-quality research remains unused. CADTH has been working hard to ensure this is not the case for Health Technology Assessment (HTA) research. This presentation will share CADTH's unique approach to Knowledge Mobilization for meeting the needs of various audiences including policy-makers, physicians, nurses, pharmacists, or specialists. Successful Knowledge Translation and Mobilization is achieved by a dedicated team in collaboration with the researchers, the influencers, and those who need to know. At CADTH, we include the end-user in the creation of our research and tools, and in the dissemination of knowledge. This presentation will use various projects and examples to demonstrate applied Knowledge Mobilization of HTA research. It will illustrate the need to have a flexible approach and to be open to trying new and innovative techniques. It will emphasize how Knowledge Mobilization results in improved impact of CADTH work, and how a collaborative, context-specific approach improves the uptake of evidence and facilitation of evidence-informed decisions. This presentation will allow the lessons learned from CADTH to be used and built upon by others – across disciplines and jurisdictions– to improve health and healthcare by advancing the quality, relevance, and application of health research. With so much knowledge from research available, getting the right information to the right people, in the best way so that it can be acted upon within their context is crucial. Applied Knowledge Mobilization can help to make that happen.

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F2.4 Using In-Person Modular Workshops to Build Capacity for Health System Improvement in Regions across Canada

Presented by **WENDY MEDVED** Program Lead, Canadian Institute of Health Information

As part of a capacity building strategy, a Health System Performance (HSP) workshop was developed to build capacity for participating teams within regions across Canada to apply HSP measurement tools and data to monitor performance and take action for health system improvement. The three-day modular workshop is modeled after a course by the European Observatory on Health Systems and Policies. A pilot was conducted in Atlantic Canada in 2013. Two additional workshops followed in 2014-15; rural and northern Ontario and Manitoba. The workshop combines a core of formal teaching with a participative approach including panel discussions and group activities. Participants' experiences are central, with them raising issues and working through a case study to apply concepts and develop an action plan for improvement. Curriculum is adapted based on needs assessment surveys and feedback from an Advisory Group in each jurisdiction. Evaluation results indicate that by the end of the workshop, participants feel they have further developed their knowledge and skills to define, evaluate and improve local health system performance in their respective regions. Participants emphasize the value of the workshop in learning from peers and facilitating networking opportunities that would not otherwise be available. High rankings are given to the sessions on selecting appropriate and relevant indicators to measure health system performance; identifying sources of available health information; drilling down to investigate potential areas of low or worsening performance; effectively communicating health information to different stakeholders; and developing an action plan for improvement. Decision-makers are increasingly using HSP information to inform policy and drive improvement in the health system at all levels. The workshop helps individuals working in performance improvement roles to better understand the work they are doing in the broader context of health system performance management in their jurisdictions.

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F3 PRIMARY HEALTHCARE LINKED WITH SECONDARY CARE / SOINS DE SANTÉ PRIMAIRES CONJUGUÉS AUX SOINS DE SANTÉ SECONDAIRES

Fontaine E

F3.1 Impact of community-based outpatient care and medication reconciliation after discharge on reducing hospital readmissions in Ontario

Presented by **LUKE MONDOR** Epidemiologist, Institute for Clinical Evaluative Sciences

Outpatient visits after discharge from an acute hospitalization have been shown to reduce readmission rates for patients with heart failure. We examined the effectiveness of primary care physician visits or receiving medication reconciliation within one week of discharge on 30 day readmissions among a broad set of conditions in Ontario. Patients discharged alive for one of 25 case mix groups (including cardiac conditions, heart failure, COPD, stroke, gastrointestinal disorders and pneumonia) from 2008 to 2012 were identified using health administrative data. Multivariable Cox models assessed the effect of hospital-level rates of follow-up within 1 week to: 1. a usual provider of primary care (UPPC, based on patient rostering or volume of services in the past 2 years); 2. any community-based general practitioner (GP); or 3. pharmacist for medication reconciliation (i.e., MedsCheck), on a patient's risk of unplanned, all-cause readmission (or death) within 30 days. The overall rate of readmissions over the study period was 10.6% (53,070 of 596,496 total discharges). The median (interquartile range) hospital-level follow-up to a UPPC, GP or receiving MedsCheck was 26.0% (22.3-30.0%), 29.6% (24.1-33.9%) and 1.7% (1.2-2.3%), respectively. Compared to patients discharged from hospitals with the lowest rates of follow-up to a UPPC (quartile 1), those discharged from hospitals with the highest rates (quartile 4) were 7.1% less likely to be readmitted (Hazard Ratio, HR=0.929, 95% confidence interval, CI=0.901-0.957). Patients discharged from hospitals with the highest rates (quartile 4) of medication reconciliation were 9% less likely to be readmitted, relative to hospitals with low rates follow-up (HR=0.900, 95%CI=0.887-0.945). No statistically significant differences were observed for post-discharge follow-ups to any general practitioner. This research suggests that post-discharge follow-up with a usual provider of primary care and receiving medication reconciliation are key community-based practices that reduce hospital readmissions among patients discharged with a range of common clinical conditions.

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F3.2 Exploring Palliative Care Services in Primary Care Practices; a Comparison of Ontario and Quebec

Presented by **TARA WALTON** Policy Research Analyst, Cancer Care Ontario

Little is known about the current state of primary level palliative care. Primary care practices in Ontario and Quebec were surveyed to explore the extent to which these practices provide palliative and end of life care, as well as barriers and facilitators to the provision of this care. A self-administered retrospective online survey was sent by e mail to collect quantitative data from primary care groups. In Ontario, Family Health Teams, Community Health Centers, Aboriginal Health Access Centers, and Nurse Practitioner Led Clinics were targeted. In Quebec, Family Practice Teaching Units, Family Medicine Groups, and Local Community Services Centres were targeted. Questions focused on types of services provided, provision of after-hours care, access and use of various community palliative care services, and whether practices maintained a registry. Surveys were completed by 102 practices in Ontario and 39 practices in Quebec. In both provinces, most of the practices reported that at least some members of their group provided palliative care, although the types of services provided differed between Ontario and Quebec. The provision of after-hours care, and how the groups provide palliative care to their patients varied between provinces. In both provinces, more than half of the practices reported maintaining a registry of patients who require palliative care. There were noted variations in both the facilitators and the barriers to the provision of palliative care for groups in Ontario compared to groups in Quebec. Results of the survey provide insight into the current practice patterns of primary care practices in the delivery of palliative care. Identifying gaps in palliative care provision and barriers to care delivery can help guide development of a targeted strategy for building capacity in primary care practices.

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F3.3 From acute care to primary care: examining follow-up with physician after acute care hospital discharge in Alberta and Saskatchewan

Presented by **XI-KUAN (SEAN) CHEN** Senior Researcher, Canadian Institute for Health Information

Physician follow-up and care coordination quickly after hospital discharge may prevent complications and improve patient outcomes. In Canada, physician follow-up is not well documented. Using acute and physician billing data from Alberta and Saskatchewan, we analyzed follow-up rates in select patients, predictors of higher rates and their effect on readmission. Linking discharge abstracts to physicians' billing data (2010–13), we identified adult patients discharged home (with or without care) after an acute myocardial infarction (AMI), heart failure (HF), or chronic obstructive pulmonary disease (COPD) and determined whether they followed up with a family physician or specialist within 7 or 30 days after discharge. We also examined 30-day unplanned readmissions for these patients (excluding 0-7 day readmissions, as these patients had fewer chances for a follow-up as they were readmitted prior to that). We analysed predictors of follow-ups: characteristics of patient, hospital, community, and previous encounters with the health system as predictors of follow up and as covariates in the readmission analysis. More than one third of patients for AMI, HF and COPD in both provinces saw a physician within seven days after discharge (ranging from 35% to 55%). And, more than three quarters of patients had a physician follow up within 30 days (ranging from 77% to 92%). Follow-up rates were lower for COPD patients and higher for AMI patients. Rural regions, smaller hospitals and low-income patients tend to have lower follow up rates in both provinces. Older patients and patients who required a surgical procedure during hospitalization tend to have higher follow-up rates. We did not find a statistically significant correlation between 7-day physician follow-up and 30 day readmission. Although there was regional and disease variation, overall physician follow-up rates for AMI, HF, and COPD in both provinces were high. Physician follow-up remains an important step in continuity of care and further examining barriers of a timely follow-up is important.

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F3.4 Keeping Family Physicians in the Loop: The receipt of discharge summaries after hospital admissions in Ontario

Presented by **LIISA JAAKKIMAINEN** Family Physician/Scientist, Institute for Clinical Evaluative Sciences

Receiving hospital discharge information is associated with fewer medication errors, decreased readmissions and better provider satisfaction. This study determined whether information from a patient's hospital admission is received by their FP and what patient and physician factors are associated with the receipt of this discharge information. A descriptive record linkage study of 300 community-based FPs Electronic Medical Record (EMR) data linked to health administrative data (called EMRALD). For all EMRALD patients over 18 years of age in 2012/13, the proportion of hospital discharge notes received into the FPs EMR after either a medical or surgical admission was calculated. Pregnancy-related admissions were excluded. The receipt of the hospital discharge note was 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). A chi square test was performed to compare those patients/providers receiving and not receiving a hospital note. For fiscal 2012/13 there were 13,253 medical and surgical hospital admissions for 193,838 EMRALD patients. Only 13.2% of medical and surgical hospital admissions had a hospital discharge note in their FP EMR. Patient over 65 years, patients with a higher co-morbidity and patients living in a lower SES were more likely to have a discharge note in their FP's EMR. Older and male FPs, FPs in rural practices and FPs practicing in fee-for-service care models were more likely to receive a hospital discharge note. The vast majority of FPs do not receive hospital discharge information about their patients. System structures to improve the transfer of hospital discharge information are still needed to improve the receipt of information by FPs.

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F4 HEALTH ECONOMICS (COSTS) / ÉCONOMIE DE LA SANTÉ (COÛTS)

Fontaine F

F4.1 Cost-Drivers of Private Drug Plans in Canada

Presented by **ELENA LUNGU** Senior Economic Analyst, Patented Medicine Prices Review Board

This study is intended to inform policy development discussions related to the sustainability of private drug plans in light of various cost drivers including high-cost drugs and claimants. The study analyzes the recent trends and provides insight into factors impacting expenditure levels in prescription drug expenditures in private drug plans in 2013. Data from the IMS Brogan® database were extracted, analysed and modelled to articulate cost drivers in private pay direct drug plans from the point of view of price effects, volume effects, and other recent trends potentially impacting costs. The analysis also delves into provincial-level analysis and comparisons with public drug plans. Cohorts of high-cost beneficiaries are analyzed based on their level of annual drug expenditure. A therapeutic profile identifies contributors to expenditure growth in this segment of the beneficiary population. Additional focus is given to high cost drugs and claimants to provide insight on their net and potential effects. Low rates of growth in prescription drug expenditures were observed in private drug plans in recent years, driven by ample opposing "push" (positive) effects and "pull" (negative) effects. "Pull" effect on drug cost levels included generic price reductions and generic substitution resulting in important savings in 2012/13, while "push" effects on drug cost levels off-set many of these cost saving effects. The results of this analysis suggest that a small proportion of the beneficiary population account for a large share and most substantial growth in drug expenditures, mainly fueled by increased use of high-cost biologic drugs. These results suggest that there may be increasing pressure from high cost drugs and claimants moving forward. A stronger understanding of the forces driving expenditures in the industry, including high-cost drugs and claimants, will inform discussions moving forward with respect to the ability to anticipate and respond to evolving cost pressures and thus promote the sustainability of private plans.

Co-Author(s): Gary Warwick, Patented Medicine; Prices Review Board

F4.2 High-cost users of prescription drugs: a population-based analysis by age and sex from British Columbia, Canada

Presented by **KATE SMOLINA** Pharmaceutical Policy Analyst, UBC Centre for Health Services and Policy Research

There is growing interest in high users of Canadian health services, however, there is little research on high-cost users of prescription drugs as population-based prescription databases are scarce. Using British Columbia's (BC) population-based records, we examine prescription drug spending patterns and patient characteristics across user groups by age and sex. We used population-based, linked health and socio-demographic datasets from 2007 to 2011. We empirically derived a taxonomy classifying individuals into a range of user groups based on annual prescription drug costs. User groups included non-users, average users, moderate cost users, intermittent high cost users, and persistent high cost users. We examined between-group variation in patient characteristics, health status, mortality, hospitalizations, and use of medical services. Finally, we used hierarchical clustering techniques to identify any patterns of medicine use that might characterize high-cost users by age and sex. Persistent high-cost users, whose drug costs ranked in the top 10% from 2007 to 2011, accounted for 6% of the population but were responsible for 45% of total prescription drug spending. High-cost users are often older, have lower incomes, and suffer more co-morbidities than average or moderate cost users. Concurrent use of medicines (polypharmacy) is extremely common among high-cost users, with persistent high-cost users annually filling prescriptions for nearly 10 (9.8) different types of medication, on average. Higher use of cancer drugs and biologics for inflammatory conditions distinguished intermittent high-cost users from persistent high-cost users, who used more drugs treating chronic conditions. Cluster analyses further investigating concurrent medicine use among high-cost users showed significant heterogeneity in the patterns of polypharmacy within and across user groups. Prescription drug spending is highly concentrated and common drugs treating chronic conditions account for most spending, even among high-cost user groups. Thus, in addition to efforts managing polypharmacy among high-cost users, cost-control policies might best focus on encouraging price competition in drug classes used by average and high-cost users alike.

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F4.3 Total and attributable healthcare costs of hypertension: historic and projected costs in Alberta, Canada

Presented by **KERRY MCBRIEN** Assistant Professor, University of Calgary

Hypertension is a major risk factor for cardiovascular diseases, which have high morbidity, mortality and cost. Although effective hypertension prevention programs exist, little is known about their potential cost savings. The objective of this study was to quantify the costs attributable to hypertension and to project this figure to 2020. We used administrative data for the province of Alberta from 2002 to 2010 that included detailed records for physician claims, hospitalizations, and ambulatory care, as well as medications for patients over 65 years of age. We identified patients with and without hypertension and calculated their total healthcare costs. We then estimated the costs that could be attributable to hypertension using a two-part generalized linear regression model that adjusted for sociodemographic factors, including age, sex, First Nations status, and neighbourhood income quintile, as well as comorbidities. Finally, we projected attributable costs to 2020 assuming current growth trends continue. Twenty-one per cent of Alberta adults had hypertension in 2010, and this number is expected to reach 27% by 2020. In 2010, the average hypertensive patient had an annual healthcare cost of $5607 (excluding medications), of which $2276 (41%) was attributed to hypertension. Alberta healthcare costs attributable to hypertension are projected to nearly double from $1.4 billion in 2010 to $2.7 billion in 2020. This projected $1.3 billion increase is due to population growth (14%), an aging population (39%), increasing age- and sex-specific hypertension prevalence (15%), and increasing per-patient hypertension-attributable costs (31%). Accounting for provincial differences in per capita healthcare spending and hypertension prevalence, we estimated the 2010 Canadian healthcare costs attributable to hypertension to be $13.1 billion. The costs attributable to hypertension are significant and represent 20.5% of direct healthcare spending on adults. Growing hypertension prevalence and severity contribute significantly to large anticipated growth in costs. Implementation of proven effective interventions to decrease both these factors may lead to large cost savings.

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F4.4 Does Higher Spending Improve Survival Outcomes for Myocardial Infarction? Examining the Cost-Outcomes Relationship using Time-Varying Covariates

Presented by **DEBORAH COHEN** Senior Researcher, PhD, University of Ottawa

Previous research has found higher hospital spending for AMI to be associated with improved patient survival; however, the timing of spending in relation to the outcome has been overlooked. The purpose of this study was to examine the AMI cost-outcome relationship taking time into account to adjust for survivor-treatment-selection bias. Survivor-treatment-selection bias occurs when the timing of treatment in relation to survival is not accounted for. Patients who live longer are also more likely to receive treatment. In this context, an ineffective treatment can appear erroneously to improve survival simply because healthier patients live long enough to receive treatment. In this study, a standard Cox survival model was compared to an extended Cox model using hospital costs as a time-varying covariate, to examine the impact of cost on one-year survival in a cohort of 30,939 first-time AMI patients in Ontario, Canada from 2007 to 2010. In both models higher patient-level AMI hospital spending decreased patient's hazard of dying. In the extended model, a 10% increase in patient-level spending was associated with a 3.6% decrease in hazard of death. However, the protective effect of AMI spending on outcomes was overestimated by 62% when survivor-treatment-selection bias was overlooked. This study represents the first of its kind to estimate the impact of survival-treatment-selection bias in cost-outcomes healthcare research. The findings of this study suggest that if survivor-treatment bias is overlooked, future research may materially overstate the protective effect of patient-level spending on survival outcomes.

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F5 QUALITY, SAFETY & PERFORMANCE MEASUREMENT AND CHRONIC DISEASE MANAGEMENT / QUALITÉ, SÉCURITÉ ET MESURE DU RENDEMENT ET GESTION DES MALADIES CHRONIQUES

Fontaine G

F5.1 Patterns and cost of health care during transitions to adult care among youth with chronic conditions in Ontario: A population-based cohort study

Presented by **SIMA GANDHI** Epidemiologist, Institute for Clinical Evaluative Sciences

More youth with chronic conditions are surviving into adulthood. Transition to adult health care is often sub-optimally executed with adverse outcomes reported, but only in small samples. This population-based study describes healthcare outcomes for youth with chronic health conditions requiring transition to adult care across a number of conditions. Retrospective, cohort-study using population-based health administrative and registry data in Ontario, Canada. Youth born April 1st 1989-April 1st 1993 were assigned into mutually exclusive, hierarchically arranged groups: 'complex' chronic conditions [CCCs: neurological impairment, cystic fibrosis, systemic lupus erythematosus, sickle cell disease (SCD)], 'non-complex' chronic conditions [non-CCCs: inflammatory bowel disease, type 1 diabetes, congenital heart disease, asthma], and mental health conditions (MHCs: schizophrenia, eating disorders and mood/affective disorders). Patterns of health system utilization and costs were examined two years pre (age 16-18 years) and post-transition (age 18-20 years) to adult care, which is age 18 in Ontario for most pediatric services. A total of 186,869 youth (43% female) were identified; 139 (0.1%) died before and 159 (0.1%) following transition. Poverty, defined as lowest neighborhood income quintile, was most prevalent in those with SCD (45.8%) and least among those with eating disorders (9.9%). Health system costs increased slightly for non-CCCs ($1513 (7793) vs. $1655 (8128), p<.0001), but did not change pre and post-transition for those with CCCs (mean (SD): $23,730 (54,674) vs. $22,920 (62,919), p=.41), or MHCs [$7,549 (18,858) vs. $6,687 (23,698), p=.11]. Emergency department visits increased by 13% for CCCs (p=.001) and 10% for non-CCCs (p<.0001), but not MHCs (p=.39). Acute care admissions and length of stay (LOS) declined for both CCCs and MHCs (p<.0001 for both), and LOS (but not admissions) declined for non-CCCs (p<.0001). Pediatric transition to adult care is characterized by minimal change in health service use and costs with the exception of emergency department visits. This may indicate service gaps and could be used to monitor interventions aimed at improving transitions.

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F5.2 Ontario's Health Links: Measuring Success

Presented by **SEIJA KROMM** Policy Analyst, Alberta Health, Government of Alberta

Health Links, formal networks developed to improve integration of patient care, commenced in August 2012. The objective of this study was to conduct empirical analysis to assess the baseline performance of Ontario's 54 Health Links (HLs) on measurable indicators, using the Triple Aim Framework for quality improvement as a guide. Indicators were chosen, defined, and quantified using population-level administrative data from fiscal year 2012 housed at the Institute for Clinical Evaluative Sciences. Six health system indicators aligning with the Triple Aim Framework were assessed: 1. Cost: Average government costs/month alive; 2. Health Outcomes: Acute hospitalization rate; and 3. Experience: Proportion of individuals rostered to a primary care physician; Primary care follow-up within seven days discharge; Low acuity ED visit rate; 30-day readmission rate. Results for all Ontarians and top 5% high cost users in each HL were measured and compared to provincial averages and non-HL provider networks in the province. Pockets of high and low performance were found when HLs were grouped by regions. Individual HLs vary in their indicator performance; no HL is a high performer for all indicators. Urban HLs had better baseline performance than suburban and rural HL for their full population when compared to the provincial average. Conversely, rural and suburban HL performed better than urban HL in their population of top 5% high cost users. The performance of HLs was compared to non-HL provider networks (PNs) using rate ratios. While statistically significant differences between HL and PN were found, most differences were not substantial (rate ratios were close to 1). Substantial differences were found for low acuity ED visits for both cohorts between suburban (rural) HLs and suburban (rural) PNs. HLs are at different stages of development, and starting at different levels of performance. There is potential for improvement as HLs focus on their target populations and learn from each other. Comparing HLs to PNs can be used to demonstrate the prospective and realized opportunities for HL and PN improvements.

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F5.3 Practicality of using the Patient Activation Measure to gauge program effectiveness

Presented by **PATRICK MCGOWAN** Professor, University of Victoria

There were two objectives in this study: to investigate whether a person's level of activation, as measured by the Patient Activation Measure (PAM), is increased by participating in community self-management programs or receiving self-management support (SMS) from health professionals, and; to develop a sampling method to facilitate data collection. Activation refers to people's ability and willingness to take on the role of managing their health and health care. The PAM assesses an individual's knowledge, skills and confidence in managing health and higher PAM scores are associated with several desired outcomes. Between 2012 and 2014, 2422 persons with chronic health conditions who were involved in six patient education programs completed the PAM before beginning the program that used SMS strategies and again six-months later. A matched group pre- and six-month post-program design was used to compare means at the two time points. To estimate sample sizes mean differences, standard deviations and confidence intervals were calculated for each program. The post-PAM mean scores for each program were significantly higher than the pre-PAM mean scores with mean differences ranging from 2.8 to 10.7. As well, a significant proportion of persons who were at lower levels of activation at baseline had progressed to higher activation levels. Using a web-based sample size calculator (https://.statstodo.com/SSizPairedDiff_Pgn.php) and choosing κ=.05, power = .80, and plugging in the mean differences and standard deviations for each program, sample sizes were calculated. For the program with the largest change (10.7), and random sample of 23 subjects would be required. For the program with the smallest change (2.8), a random sample of 139 subjects would be required. Persons who participated in programs which used SMS strategies had higher activation levels six-months later. The arduous task of locating and collecting post PAM's from subjects who participated in a program six-months earlier was made easier by calculating required sample sizes.

F5.4 A Mixed Methods Study: Examining the Relationship between Therapeutic Self-Care and Adverse Events for Home Care Clients in Ontario, Canada

Presented by **WINNIE SUN** Post-Doctorate Trainee, University of Toronto

The purpose of this mixed methods study was to examine the concept of therapeutic self-care in the context of home care, as well as its influence on the safety of home care clients and their informal caregivers. A mixed methods design, involving quantitative and qualitative methods, was used to address the research question. The quantitative approach used a retrospective cohort design and utilized secondary databases available for Ontario home care clients. Logistic regression analysis was used to examine the association between therapeutic self-care and adverse events. The qualitative approach utilized one-on-one interviews with the clients and their informal caregivers recruited from one home care agency in Ontario, Canada. Qualitative description was used to analyze data that generated themes about clients and their caregivers' perspectives of home care safety in relation to therapeutic self-care and informal caregiving. The quantitative results indicated that low therapeutic self-care ability was associated with an increase in the odds of clients experiencing: (1) unplanned hospital visits; (2) decline in activities of daily living; (3) falls; (4) unintended weight loss, and (5) non-compliance with medication. Analyses of the qualitative interview data revealed four over-arching themes: (1) Struggling through multiple aspects of safety challenges; (2) Managing therapeutic self-care by developing knowledge, competency and self-confidence; (3) Coping with informal caregiving through problem-solving, stress management and caregiver relief; (4) Seeking education, support and collaboration from home care. The results provided a better understanding of the nature of the relationship between therapeutic self-care ability and the prevalence and incidence of adverse events experienced by home care clients. The qualitative findings provided insight into the safety problems related to therapeutic self-care and informal caregiving. This mixed methods study advanced understanding of therapeutic self-care in the context of home care. This knowledge is vital to policy formulation related to the role of home care services in improving client's therapeutic self-care ability to reduce safety related risks and burden for home care recipients.

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F6 PHARMACEUTICAL POLICY II / POLITIQUE PHARMACEUTIQUE II

Fontaine H

F6.1 Reforming private drug coverage in Canada: Inefficient drug benefit design and the barriers to change in unionized settings

Presented by **MARC-ANDRE GAGNON** Assistant Professor, School of Public Policy and Admnistration, Carleton University

Prescription drugs are the highest single cost component for employees' benefits packages in Canada. The study explores the reasons behind the incapacity to implement cost-containment measures in private drug benefits package by examining how private sector employers negotiate drug benefit design in unionized settings. May Through 18 semi-structured phone interviews conducted with experts from private sector companies, unions, insurers and plan advisors, this study explores the reasons behind this incapacity to implement cost-containment measures by examining how private sector employers negotiate drug benefit design in unionized settings. Respondents were asked questions on how employee benefits are negotiated; the relationships between the players who influence drug benefit design; the role of these players' strategies in influencing plan design; the broad system that underpins drug benefit design; and the potential for a universal pharmacare program in Canada. Experts who participated in this project appeared to have a common understanding of the salient issues facing drug benefits. The five following points were most striking . 1-The necessity of information-sharing between employers and employees. 2- Democratic governance of unions requires engagement of informed employees. 3- The need for incentives for insurance companies to reduce costs 4-The need for government intervention All have suggested some form of government intervention, either through a national formulary, a risk-pooling scheme,or an arrangement designed to provide some sort of universal pharmacare to Canadians. Private sector negotiations between unions, employers, consultants and insurance companies fail to achieve sustainable and cost-effective drug plan designs. Since pharmaceuticals are the highest single cost component of private health benefits, there is an urgent need to implement measures for managing the costs of drug plans without degrading health outcomes.

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F6.2 Do Financial Conflicts of Interest Influence the Drug Recommendations in Canadian Clinical Practice Guidelines?

Presented by **ADRIENNE SHNIER** Ph.D. Candidate, York University

Clinical practice guidelines (CPGs) are widely distributed by medical societies and associations with the intent to provide systematic recommendations to clinicians making complex medical decisions. We examine the influence of financial conflicts of interest (COI) disclosed by authors of CPGs and the first-line pharmaceutical recommendations made in those guidelines. We include CPGs most recently reviewed or published between 01-January-2012 and 06-November-2013, housed in the Canadian Medical Association (CMA) Infobase. After imposing inclusion and exclusion criteria, we extracted drug recommendations, author characteristics, and disclosed COI for a maximum of 25 authors per guideline. We emailed corresponding authors when COI disclosures were either missing or incomplete (response rate: 75%). When more than 25 authors were named, we included the committee chair(s) and randomly selected the remaining authors. We are currently conducting statistical analyses on authors' COI with manufacturers of recommended drugs and whether brand vs. generic drugs were recommended in the guidelines. The CMA Infobase houses 1,151 CPGs; however, after imposing our inclusion and exclusion criteria, 35 CPGs were included in our analysis. Our preliminary descriptive results indicate that 30/35 (86%) guidelines recommended brand drugs, while the remaining 5 recommended generic drugs. We collected data for 518 authors on 35 guidelines. One-hundred fifty-one (30%) had financial COI with one or more pharmaceutical companies. Ninety-six of 518 authors (19%) disclosed financial COI with one or more manufacturer of the drugs recommended for first-line treatment in the respective guidelines. We are currently running a logistic regression model with generalized estimating equation (GEE) on this data to establish the strength of the association between authors' disclosed financial COI and whether they recommended brand or generic drugs for first-line treatment. Our study addresses and fills a gap in Canadian literature regarding disclosure of financial COI and drug recommendations in CPGs in Canada and is the first to assess guidelines and financial COI disclosed by authors on guidelines based on their inclusion in the CMA Infobase.

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F6.3 Generic Drugs in Canada, 2013

Presented by **ELENA LUNGU** Manager, National Prescription Drug Utilization Information System Database Privacy Impact Assessment

This analysis contributes to discussions and informs policy decisions affecting generic pricing, by comparing the price of generic drugs in Canada with those in other industrialized countries. The analysis compares the 2013 ex-factory generic prices of 487 leading drugs in Canada with international prices for the same drugs. The main international markets considered are: France, Germany, Italy, Sweden, Switzerland, the United Kingdom and the United States. Data was collected from the MIDAS™, IMS AG (All Rights Reserved) for Canadian and international generic and brand prices. Data for the Ontario Drug Benefit Program was collected from the NPDUIS-CIHI database. In 2011, international generic prices were, on average, 35% lower than Canadian prices; by 2013, they were still 32% lower. Domestically, average Canadian generic prices dropped from 56% of branded product prices in 2011 to 39% in 2013 due to changes in provincial reimbursement policies. Ontario fared even better, with 2013 generic prices at 31% of the brand levels, which translates into a 25% price differential compared to the international average. The results based on Ontario prices in the second quarter of 2013, which are presumed to be more reflective of price reductions resulting from the early phase of the Value Price Initiative, reduce the price gap and are a marked improvement. Since then, there have been further generic price reductions, which are not captured in the report. The report finds that despite a significant reduction in Canadian generic drug prices in recent years, they remain appreciably higher than international levels.

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F6.4 Trends in prescription opioid use in British Columbia

Presented by **KATE SMOLINA** Post-Doctoral Fellow, Centre for Health Services and Policy Research, University of British Columbia

Understanding how patterns of use of prescription opioids have changed over the last decade is important for combatting the current prescription opioid crisis. In this study, we describe trends in prescription opioid dispensations between 2004 and 2011 in British Columbia (BC). This population-based cohort study drew on de-identified linked administrative datasets for BC residents, including prescription records and socio-demographic information. The study cohort included individuals with at least one opioid prescription during the study period. We calculated the morphine equivalent (MEq) dose for each opioid dispensation and excluded opioids that are not generally prescribed to treat chronic pain. There were no changes in the overall proportion of BC population using opioids, with approximately 12% of residents filling at least one opioid prescription each year. Annual prescription rates and total exposure in MEqs for all of BC doubled for oxycodone, hydromorphone, and fentanyl but did not appreciably change for other opioids. The average total annual exposure to opioids per BC resident filling an opioid prescription increased, driven by an increase in the total days of opioid therapy from 2004 (mean=49, median=8) to 2011 (mean=65, median=10). Consequently, the average daily dose in MEq per person over a year increased from 68 mg to 87 mg and the median daily dose increased from 10 mg to 16 mg. Our results suggest that the current prescription opioid crisis is driven by longer treatment periods, and thus increased opioid exposure, among those prescribed an opioid. Oxycodone, hydromorphone, and fentanyl contribute the most to the rise in total annual opioid exposure among BC residents.

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F7 PANEL / PRÉSENTATION EN PANEL

Mont Royal

F7 **Long-Term Solutions: Fair and Sustainable Options for Financing Universal Long-Term Care in Canada**

Solutions à long terme : options équitables et pérennes pour le financement universel des soins de longue durée au Canada

Presented by **BRYAN THOMAS**, Faculty of Law, University of Ottawa; **SYLVAIN PARADIS**, Health Canada; **MICHAEL WOLFSON**, Faculty of Medicine, University of Ottawa; **MICHEL GRIGNON**, Department of Economics, Department of Health, Aging & Society, McMaster University; **AMÉLIE QUESNEL-VALLÉE**, Department of Epidemiology, Biostatistics and Occupational Health, Department of Sociology, McGill University

Canada's aging population poses looming challenges for the financing of long-term care (LTC). The country's longstanding blueprint for universal health care, the Canada Health Act, addresses only hospital and physician services, leaving nursing home care, community care, and home care to a patchwork of provincial and territorial programs. Elderly Canadians requiring assistance with basics personal care—e.g., eating, dressing, bathing, and taking medications—often face long wait-times for publicly-financed services. Some occupy beds in overcrowded hospitals while awaiting transfer to an acceptable nursing home; others pay out-of-pocket to receive care from private providers of varying quality; many rely on informal care from family and friends. As things stand, wait-lists are too long, access is two-tiered, quality of care is inconsistent, and the system is plagued by inefficiency. Several prominent reports have highlighted the need for a national strategy, yet there is ongoing debate over how to finance a more robust LTC scheme. The panelists will offer diverse disciplinary perspectives on this issue. Colleen Flood (Faculty of Law, University of Ottawa) is an internationally recognized legal scholar with a breadth of experience in comparative health system financing. Michael Wolfson (Canada Research Chair in Population Health, University of Ottawa), is an expert on population modelling and long-term policy planning, who has published extensively on the policy challenges of an aging population. Michel Grignon is an associate professor with the Department of Health, Aging & Society and the Department of Economics at McMaster University, and is the Director for the Centre for Health Economics and Policy Analysis, a University-based centre fostering inter-disciplinary research. He has worked on diverse research projects, including projects exploring various aspects of long-term care financing. Amélie Quesnel-Vallée (Department Epidemiology, Biostatistics and Occupational Health and Department of Sociology, McGill) is an expert on social inequalities in health. Sylvain Paradis (Director General of Applied Research and Analysis at Health Canada) has recently spearheaded an interdisciplinary research project, modelling Canada's LTC needs in collaboration with Statistics Canada, and exploring diverse finance options. Drawing on their respective experience and expertise, the panellists will discuss the following issue, respectively: Mr. Paradis will introduce the context and challenges associated with the financing of Long-Term Care in Canada, which will open the presentation on potential solutions. Professor Wolfson will outline the challenges and methods for understanding future LTC needs and financing options in the context of current pension reform policy debates. Professor Grignon will present what we know about the cost of formal long-term care in Canada, its sources of funding, and changes over the past decades. Professor Quesnel-Vallée will present the case of the recent Australian aged care reform, which illustrates that both choice and equity can be pursued in a centralised, universal tax-based scheme. Professor Flood will discuss the option of mandating and heavily regulating private LTC insurance to achieve universality, along the lines of Enthoven's "managed competition" model.

F8 PANEL / PRÉSENTATION EN PANEL — Montreal Ballroom

F8 **Models and Innovations of Primary Health Care: What works? In what ways? For whom? and What's next?**

Modèles et innovations en soins de santé primaires : qu'est-ce qui fonctionne, de quelle manière, pour qui et que nous réserve l'avenir ?

Presented by **SIMONE DAHROUGE**, University of Ottawa; **RUTH MARTIN MISENER**, RN-NP, PhD, Dalhousie University; **CATHIE SCOTT**, PhD, Chief Operating Officer & Lead, Policy Research, Alberta Centre for Child, Family & Community Research; **MYLAINE BRETON**, PhD, University of Sherbrooke

We have seen a dramatic increase in primary health care models with a wide diversity of characteristics and implementation strategies across Canada. In this session lead researchers from different provinces and decision-makers will explore what we know about the alphabet soup of primary health care models in relation to access, continuity of care and cost; if different models work best for different populations; and where we go from here. Simone Dahrouge, University of Ottawa, will share their work on PHC models in Ontario, delving into how implementation creates greater diversity than definitions would capture. Ruth Martin Misener, RN-NP, PhD, Dalhousie University, will speak to the incremental, provider-led models of care development and the new Nova Scotia Collaborative Care Model Framework. Cathie Scott, PhD, Chief Operating Officer & Lead, Policy Research, Alberta Centre for Child, Family & Community Research, will speak to models fit for context-commonalities and necessary difference with examples from the Alberta context. Mylaine Breton, PhD, University of Sherbrooke, will share on organizational innovations implemented in Québec to improve access to PHC.

Poster Presentations – Day 1

Présentations d’affiches – Jour 1

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

FONTAINE AB

A comparison between initial and well established implementation periods of the Ontario MedsCheck Annual pharmacy medication review service

LISA DOLOVICH OPEN co-lead, Research Director, Associate Professor, OPEN (Ontario Pharmacy Research Collaboration), McMaster University

A MedsCheck Annual (MCA) consultation is a medication review service funded by the Ontario government for people taking three or more prescription medications for chronic conditions. The objective of this study was to compare the demographic and clinical characteristics of MCA recipients in two time periods: 2007-2008 and 2012-2013. This cohort study leveraged linked administrative claims data from two time periods: 1) April 1, 2007 to March 31, 2008, the first year that MCAs were provided; and 2) April 1, 2012 to March 31, 2013, the most recent year with complete data available at the time of analysis. Ontario Drug Benefit (ODB) patients were eligible for MCAs since April 1, 2007 and on July 17, 2007 MCA eligibility was extended to all Ontario residents taking three or more prescription medications for chronic conditions. Descriptive statistics were calculated for recipient characteristics over the two time periods and stratified by age. MCA was provided to 194,726 Ontarians in 2007-2008 (67% over age 65) and 372,054 Ontarians in 2012-2013 (44% over age 65). In 2007-2008, more recipients lived in urban centres (91%) versus 2012-2013 (86%). The proportion covered by the ODB Program decreased from 48% in 2007-2008, to 37% in 2012-2013, as did the proportion with high medication costs in the previous year (14% in 2007-2008 to 4% in 2012-2013). Diagnoses of hypertension (76% in 2007-2008 and 60% in 2012-2013), COPD or asthma (34% in 2007-2008 and 29% in 2012-2013), and diabetes (40% in 2007-2008 and 22% in 2012-2013) were most common. In 2007-2008 versus 2012-2013, more Ontarians were taking antihypertensives (85% versus 77%), diuretics (53% versus 44%) and narcotics (30.9% vs. 22.8%) prior to receiving MCA . Provision of MCA increased over the first 5 years of the program. Initial recipients had a higher prevalence of disease, and greater medication use and costs compared to recipients in 2012-2013. Early delivery of the MCA service was more frequently provided to Ontarians with a high burden of comorbid illness.

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A How-To Guide for Planning Hospital-to-Home Care Transition Interventions in Older Adults: Findings and Implications of a Realist Synthesis

ANUM KHAN PhD student, University of Toronto

Older adults transitioning home after a hospitalization are at heightened risk for medication errors, functional decline, re-hospitalization and admission to institutional care. The goal of this study was to synthesize evidence on which care transition activities benefit this population and how activity outcomes are effected by co-existing activities and context. The results of a scoping review of care transition intervention studies were summarized using the realist synthesis technique. Through both qualitative and quantitative analysis, we examined how and why more than 40 different care transition activities (e.g. medication reconciliation, tele-health monitoring) achieved their outcomes. We looked at variation in activity mechanisms across different target populations in the presence of coexisting intervention activities and across contexts. Contextual variables included location of the intervention and organizational characteristics. The results of this synthesis are summarized in a cohesive program theory for care transition interventions, with examples of key activity-mechanism-outcome relationships provided. Most of the reviewed studies employed similar transition activities but differed significantly in how they identified their target populations, the timing of activities (pre- or post-discharge), and the type of health care provider who delivered activities. These factors had significant effects on whether activities achieved desired outcomes. Similarly, the context created by shared electronic medical records, program champions at the organizational level and financial incentives for success modified the effect of intervention activities across studies. This study leverages the differences in care transition intervention characteristics across studies to produce actionable outputs. The specific activity-mechanism-outcome relationships (and their modification with contextual factors) identified are relevant to decision-makers and managers seeking to improve care transition interventions in their unique healthcare context.

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A New Service Delivery Model to Improve Access to Orthopedic Surveillance for Children with Cerebral Palsy (CP)

KAREN HURTUBISE PhD student, Université de Sherbrooke

A significant increase in wait-times precipitated the Neuromotor Clinic (NMC) to introduce a new physiotherapist-led (PT-led) orthopedic surveillance clinic to improve access for its patients. The purpose of this study was to monitor wait-times, and compare parent and staff satisfaction and family centeredness between the PT-led and the traditional physician-led model. Wait-time data were monitored monthly through the service tracking system. A sample of convenience of parents attending either the PT- or physician-led clinics were surveyed using the Visit Specific Satisfaction Instrument (VSQ-9) and the Measurement of Process of Care (MPOC-20). Interprofessional collaboration was measured using the Collaboration and Satisfaction about Care Decisions (CSACD) questionnaire and staff satisfaction was assessed through the Measure of Process of Care for Service Providers (MPOC-SP). Descriptive statistics were used to analyze the results. Potential differences between the two models were assessed using the Mann-Wittney U. Wait-times decreased by 125 days for initial appointment with physician and from 830 days for follow-up visit. Most parents graded their overall visit as good in both models with improved patient satisfaction with access to care in the PT-led clinic and greater satisfaction with technical skills with the physician-led. MPOC-20 scores indicated that staff exhibited family centered behaviors “to a fairly great extent” in all domains in both models. The PT-led model exhibited higher scores in delivering a more coordinated and comprehensive approach, while the physician-led clinic enabled the provision of more general information. Staff involved in PT-led clinic was more satisfied with physician collaboration in care decisions and their ability to treat patient with respect. Despite these variations, no statistical differences were identified. A PT-led clinic model provides significant improved access for children with CP to orthopedic surveillance. In addition to being a satisfactory option for parents, this model improves parents' perception of a coordinated and comprehensive service and may improved staff satisfaction with care decisions and their ability to provide respectful care.

A Resilient Nursing Workforce: The Impact of Policy Over Time

MARY CREA Statistician, McMaster University

With the recent outbreak of the Ebola virus, health human resource planning (HHR) has re-emerged as an important issue for policy-makers. This presentation will report on a 7-year analysis of the impact of a government employment policy on new nurses in Ontario using multiple data sources. The Nursing Graduate Guarantee (NGG) is an evidence-informed policy developed in 2007 to stabilize the nursing workforce and increase full-time employment for new graduate nurses. A comparative analysis of nurses who participated in the policy and those who did not participate and who entered the employment market between the years 2007 to 2012 will be presented. The study involves confirmatory analysis and the use multiple data sources. Primary data was validated by secondary data sources. The study population included six cohorts of new nursing graduates (2007 to 2012). New graduate nurses' success in finding full-time positions at various stages of their career were analyzed using multiple regression models. Models controlled for additional characteristics known to influence employment status. Results indicate that, overall, the NGG had a beneficial effect in terms of increasing the likelihood of obtaining a full-time position. Comparison between two different sources of data demonstrated good agreement in estimates of the effect of the initiative. Secondary data sources were incorporated through creation of survey weights which adjusted the characteristics of the sample to be more similar to those of the population. The use of multiple data sources allowed for improved confidence in results. Health human resources are an important topic for discussion. Countries are required to maintain a highly trained cadre of health personnel. This is one approach by governments to stabilize a workforce. Data demonstrate that the NGG did create a resilient nursing workforce over the seven years.

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A Study of Low Acuity Emergency Department Use in Regina, Saskatchewan: Incidence, Implications and Intervention

TARA TODD Student (MPP), Johnson-Shoyama Graduate School of Public Policy

The objectives for this study were to calculate the prevalence of low acuity emergency department (ED) use in Regina, Saskatchewan in 2012-2013, identify sociodemographic correlations between patients and low acuity usage, and study determinants for low acuity ED use. Policy intervention was focused on the promotion of equitable public health infrastructure to replace EDs as low acuity primary care centres. This study employed a mixed methods approach to studying determinants of low acuity emergency department attendance. Quantitative analysis was used to calculate prevalence and identify basic demographic trends of low acuity ED use. While forward sortation area (FSA) data was used to spatially map patient residences for low acuity ED attendance. Community asset mapping to assess public health infrastructure of the highest and lowest low acuity ED use areas was conducted to identify determinants for ED use. The mixed method approach was used as a strength forming strategy for this research project. Results of this study yielded correlations between low acuity ED use and sociodemographic factors, including age, gender, location of residence, classification of injury or illness based on the Canadian Triage Acuity Scale, and formed the basis for geographic study. Spatial mapping of low acuity use was used to identify the highest and lowest low acuity ED usage areas to assess public health infrastructure of these communities. Public health infrastructure was analyzed using community asset mapping and identified determinants for low acuity ED use over alternative primary care centres. Public health infrastructure was assessed based on the existence, availability and accessibility of community assets. Assets were defined as institutions and their capacity, knowledge of public and professional members, and elements of the physical infrastructure. Concluding points suggest policy intervention options to replace EDs as low acuity primary care centres to reduce costs and provide the most appropriate level of care. Policy options are presented on the basis that they are sustainable and feasible in Regina, Saskatchewan.

A survey tool to assess long term care resident experience

SHAILESH NADKARNI Vice President, Service and Operations, National Research Corporation Canada

Long Term Care (LTC) is both a health and a social program, highlighting the importance of judging social dimensions based on the opinions and experience of consumers. This study sought to update and validate a revised version of a long term care resident experience survey. The National Research Corporation Canada Long Term Resident Experience Survey (LSRE), used for nearly 15 years in Ontario Long Term Care organizations, was evaluated. Input from interviewers regarding implementation challenges and cognitive performance of the tool in the field as well as statistical analyses of survey responses were used to evaluate the validity of this questionnaire for use among residents in multiple LTC and CCC settings. Empirical analyses were based on patient experience surveys completed in 2012. The evaluation addressed recommended criteria, i.e. completeness of data, score distributions, item-scale consistency, and reliability of domain scores. A total of 8,294 questionnaires were distributed to residents of both LTC and CCC in 95 facilities. The study population included 3,401 respondents representing response rate of 41%. Response rates varied by survey distribution methods (39.4 to 64.5%), type of setting (39 to 57%), and age group (31 to 57%). Questionnaires handled by volunteers attained a significantly higher response rate. Using the original items, dimensions of Food, Activities, Staff, and Dignity all had Chronbach Alpha scores above 0.74; Autonomy and Treatment were lower at 0.65 and 0.73 respectively. While Living Environment had the lowest performance with 0.55, removing one item increased this to 0.66. All dimension showed statistically significant correlations with the ratings of overall quality of care and willingness to recommend. The revised LSRE presents a good level of scale reliability and overall criterion and content validity. Interviews provide better response and completion rates than mailed or mixed-method surveys, regardless of the type of setting, while facilitation using volunteers adds to the performance of the tool.

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A systematic review of primary care interventions to improve transition of youth with chronic conditions from paediatric to adult healthcare

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Youth with chronic conditions transitioning to adult healthcare experience poor outcomes. Recommendations have been made for more effective primary care provider (PCP) involvement and broader policy which better integrates primary and specialized care. The aim of this systematic review is to determine effective interventions to improve the PCP role in this transition. The search was conducted using Ovid Medline and Web of Science databases. Selected articles were screened independently by two reviewers, and data were extracted into summary tables categorizing study details including: country, study subjects, PCP type, role/responsibility or intervention description, patient condition, and outcomes. The search criteria were not limited to any condition given that only youth with complex and/or chronic conditions would require transition to adult care. Articles discussing opinion-based best practice or those defining family/caregivers as PCPs were excluded. A total of 591 unique citations were identified yielding 34 studies for inclusion. There were no randomized controlled trials or even observational studies of primary care interventions related to transition. Preliminary results indicate that PCP roles are not well defined and many physicians do not adhere to guiding principles for successful transition from paediatric to adult healthcare (i.e. time alone with patients). Included studies highlight recommendations focused on the need for improved collaboration between those PCP providers who care for youth after transition and paediatric PCPs and specialists in order to enhance continuity and sharing of patient data Studies also describe the need for expanding the PCP role by providing transition-specific education and skills training on caring for youth with complex, chronic illness. There are no rigorous studies to guide primary care interventions to improve transition outcomes for youth with chronic conditions. Future research and policy should focus on developing and evaluating coordinated transition interventions in the context of initiatives to better integrate primary and specialized care for high need populations.

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Assessing Health System Value in Upstream Health Interventions: A Case Study of Cardiac Rehabilitation and Prevention

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Upstream health interventions are often difficult to assess for overall health system value due to factors such as discounting, intangible outcomes, and differing value assumptions among stakeholders. This study explores the assessment of value through multiple dimensions, using the case study of a cardiac rehabilitation and prevention program Using a mixed-methods approach, health systems value was explored in three ways: (i) Changes in health status from beginning to end of program (as measured by the Short Form 36 (SF-36) health survey, n=1905 from 2008-2014), (ii) Client and staff perspectives of program impact on health, well-being, and community (through semi-structured interviews, n=16), and; (iii) Implications for cost-effectiveness (using the SF-6D health states and program administration data). Quantitative results were assessed for correlation to age, gender, health risk factors, and socioeconomic indicators. Overall, the intervention was shown to improve scores for total health, physical health, and mental health. Preliminary results indicate that variance in health scores within these domains are attributable to factors such as pre-existing health conditions, modifiable lifestyle factors such as smoking, and socioeconomic indicators including education and income level. Benefits perceived to extend into broader areas - such as safety, community, healthy aging, and reduced healthcare utilization - contribute to an overall assessment of high program value among participants and staff. As such, interview participants believe the program to be highly cost-effective and worthy of public funding. These perceptions are discussed in relation to measured cost-effectiveness of the program as well as the implications for regional policymakers involved in budgeting for such programs. Value and importance of upstream health interventions is operationalized and understood differently by users, administrators, policymakers, and other stakeholders. Therefore, assessing value in a multi-dimensional way can potentially reconcile these viewpoints to better inform policy and funding decisions.

Changing the Service Delivery Model to Meet Rehabilitation Needs of Young Children (0-3 years): Impact on Service Wait-times and Staff Perceived Performance

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Due to a 25% rise in referrals, young children with developmental delays have experienced an increased in wait-times for rehabilitation. The purpose of this study was to monitor wait-times to initial appointment with a provider, evaluate interprofessional team functioning and staff perceived family-centeredness of service throughout the service re-design implementation. Wait-time data were monitored monthly through the service tracking system. The Team STEPPS, a self-administered questionnaire of team behaviors, and the Measurement of Processes of Care for Service Providers (MPOC-SP), a service provider perception of the extent of the family centeredness of their service, were administered to all program staff at the beginning and a year into the change process. Descriptive statistics were used to analyze the survey results. Between intervals, a multi-modal change management approach was undertaken that included regular wait-time data sharing, clear individual and team caseload expectations, , and staff participation in achieving further service delivery efficiencies. Three hundred and twelve children were referred to the service during these 12 months. The average wait-time for new appointment decreased by 14 days, from 70 to 64 days, throughout the change process. Seventy-two percent of staff responded to the initial questionnaires, while 71% responded to the follow-up surveys. All domains of team behaviors improved, from 4.68 to 5.29 with team functioning demonstrating the largest improvement and team leadership the smallest Slight improvements were noted in MPOC –SP scores particularly in the domain of Providing General Information (0.58). A slight decline was highlighted in the area of Providing Specific Information. Decreasing wait-times, sustaining and even improving team behaviors, and maintaining staff perception of a quality family centered service for children with developmental delays is possible during implementation of a service re-design. A carefully crafted multi-modal change management process focused on data, expectations, and staff participation is key to this achievement.

Comprehensive Primary Care Physicians: Who are they and whom do they serve?

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Our objectives were to distinguish between physicians in comprehensive primary care (PC) office practice, 'focused practice' and other types of practice using administrative data; to quantify the number/proportion of PC physicians in each type of practice over time; to identify any important differences in patient population by practice type. An administrative database-based definition of 'comprehensive PC practice' was developed using data held at ICES, including OHIP physician billings/shadow-billings, primary care model patient rosters and various physician databases. This hierarchical algorithm was then used to determine if, in a given year, a physician was in comprehensive PC practice, focused practice or some other category. The number/proportion of physicians in each category was tracked over time. Then, using other databases developed at ICES which link (assign) patients to individual physicians who provide the majority of their primary care, the patient population of each group with respect to sociodemographic characteristics was described. In 2010/11, 11,836 of 26,751 active physicians (44%) were PC physicians. Of these, 8,589 (72%) fit the definition of comprehensive primary care. Among the remainder, 13% worked fewer than 50 days during the year, 11% were in focused practice and 3% did not fit any category. Since the late 1990s the proportion in comprehensive practice has been about 72%. We found no relationship between comprehensive practice and physician sex. With respect to patient populations, in 2002/03 approximately 82% of Ontario residents regularly saw a comprehensive PC physician. By 2010/11 this had risen to 88%. Just under 2% of residents receive their primary care from a specialist; 92% of these are children. About 10% of Ontario residents do not appear to receive regular primary care. There is good news in that nearly three-quarters of primary care physicians are in comprehensive practice. We found no evidence of a dramatic increase in the proportion of PC physicians in 'focused practice'. Nearly 90% of Ontarians had a comprehensive PC physician as their regular doctor in 2010/11.

Cost-effectiveness analysis of a two-dose HPV vaccine using the CRMM-HPVMM microsimulation model

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The CRMM-HPVMM is a Canadian, web-based, decision-support microsimulation modelling platform that can project the population-based impacts of HPV vaccination strategies. A cost-effectiveness analysis was undertaken to compare 2-dose vaccination regimens with varying duration of protection with the standard 3-dose regimen. We assumed a 70% vaccination rate among Canadian girls aged 12. Vaccine costs were assumed to be $500 for 3 doses and $330 for 2 doses. Since the vaccine was only introduced in 2007, we have little long-term data on vaccine efficacy, therefore we assumed the vaccine would be 100% protective for at least 40 years for the 3-dose regimen and varied the duration of protection for 2-doses from 10-40 years. A cost-effectiveness analysis was conducted to reveal which vaccine regimens proved cost-effective compared to no vaccine, and to understand how the duration of protection affected the cost-effectiveness ratios. The results were compared to a no vaccination scenario. Incremental cost-effectiveness ratios (ICERs) were calculated by aggregating lifetime costs of vaccination, cervical screening and treatment. The 3-dose regimen and all 2-dose regimens with duration of protection of at least 18 years dominated no vaccine. The lifetime cost savings associated with a 2-dose vaccine with 40 years protection was $745 million, compared with a cost impact of $700 million if the 2-dose vaccine only protects for 10 years, due to increased costs of treatment. If the 2-dose vaccine provides equivalent protection to the 3-dose, $600 million in savings would be realized over the lifetime of the model. ICERs were calculated using a 3% discount rate. Based on the CRMM-HPVMM, it can be concluded that the 2-dose vaccine dominates no vaccine if it provides protection for at least 18 years. More research must be done to establish the duration of both the 3-dose and 2-dose HPV vaccine regimens.

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Cost-Utility Analysis of Therapeutic Drug Monitoring for Asparaginase in Pediatric Leukemia

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Asparaginase is a chemotherapeutic agent used for pediatric acute lymphoblastic leukemia(ALL). Therapeutic drug monitoring(TDM) is used to detect patients with clinically silent inactivation of this drug. These patients experience inferior outcomes if their therapy is not changed. This project aimed to determine the costs and quality adjusted life years(QALYs) generated by asparaginase TDM compared to the current standard treatment, no TDM. This cost-utility analysis took a government health-care payer perspective and lifelong time horizon. Probabilities for the development of silent inactivation and other clinical outcomes were derived from published literature. For each identified health state, a health utility(from published literature) and cost per person in 2014 Canadian dollars(from government publications) were assigned. All parameters were inputted into a Markov decision model to determine the incremental cost-effectiveness ratio(ICER). One-way sensitivity analyses were performed for all variables to assess the impact of parameter uncertainty, and two-way analysis was performed for those variables with threshold values causing the ICER to pass above/below $50,000/QALY. TDM is associated with an increase in life expectancy of 3.4 years, from 55.6 years to 60 years. The use of TDM produces 14.4 QALYs at a lifetime cost of $319,500. Current standard treatment(without TDM) generates 14.3 QALYs at a cost of $312,500. The resulting ICER is $94,000/QALY. Using a willingness to pay(WTP) threshold of $50,000/QALY, only variation in stem cell transplant treatment costs for relapsed patients and the discounting rate are associated with a threshold where TDM becomes the preferred strategy. The ICER is also very sensitive to small decreases in specificity and thus the detection of false positive cases. In contrast, the same magnitude changes in cost-effectiveness are only seen if the sensitivity of TDM falls below 0.4. The use of asparaginase TDM for pediatric ALL is associated with a small increase in life expectancy and QALYs as well as an increase in health care costs. Consideration of other societal and ethical factors must be made prior to implementation of this technology.

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Creating Partnerships for Change: A Proposal to Study Multi-stakeholder Collaboration Towards Organizational Innovations to Promote Access to Primary Health Care for Vulnerable Populations

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To gain a deeper understanding of the effectiveness of multi-stakeholder partnerships (MSPs) in addressing complex issues in Primary Health Care (PHC). Specific objectives include: a) understanding the processes whereby teams of different stakeholders work together; b) identifying the process enablers and barriers to the development and functioning of these partnerships. This is a literature review carried out in the context of a recent international research program in which local multi-stakeholders codesign organizational interventions to improve coverage and accessibility to appropriate Primary Health Care for vulnerable patients in three provinces in Canada and three states in Australia. The literature review is the first phase in a multiple case study of the partnerships, which will later include: a) an extensive review of documentation (such as minutes of meetings); b) a survey administered to all members of the network; c) non participant observation; and d) semi-structured in-depth interviews with key informants. Despite the widespread endorsement of the partnership approach across a multitude of fields and the abundant literature stating that collaboration is a “good” thing, there is a growing need for evidence demonstrating the effectiveness of partnerships. Better analysis and guidance as to such elements as the roles and responsibilities of partnership actors, as well as when a partnership approach is or not appropriate, are needed. More research is required into the factors, both positive and negative, influencing partnerships. The research presented here responds to this research need by enhancing the conceptual, theoretical and methodological understandings of the elements that promote and hinder the effective functioning of cross-sectoral multi-stakeholder partnerships in PHC, and by assessing MSPs’ relevance. The outcomes of this investigation contribute to the growing body of literature on the structures and processes required to build successful multi-stakeholder collaborations to tackle complex issues in PHC. It also highlights and recommends future directions for more targeted research into the applicability of the multi-stakeholder partnership approach in PHC.

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Drug Use Among Seniors on Public Drug Programs in Canada, 2012

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This analysis provides an in-depth look at the number and types of drugs used by seniors, and compares drug use among seniors living in long-term care (LTC) facilities and those living in the community. Data from the National Prescription Drug Utilization Information System (NPDUIS) Database, housed at CIHI, as submitted by public drug programs in eight provinces—Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia—and by one federal drug program, managed by the First Nations and Inuit Health Branch (FNIHB). Data includes drug claims for approximately 70% of Canadian seniors. Nearly two-thirds (65.9%) of seniors had claims for 5 or more drug classes, and more than one-quarter (27.2%) of seniors had claims for 10 or more drug classes. The most commonly used drug class was statins, which are used by almost half of seniors (46.6%). More than one-third of seniors (38.9%) had claims for a drug on the Beers list—a list of drugs identified as potentially inappropriate to prescribe to seniors. More than half of seniors living in LTC facilities used 10 or more different drug classes (60.9%), more than double the proportion among seniors living in the community (26.1%). In LTC facilities benzodiazepine use was double, antidepressant use triple and antipsychotic use nine times the rate among seniors living in the community. A high proportion of seniors, particularly those in LTC facilities, are at increased risk of adverse drug events due to the number of medications they are taking. Findings illustrate the importance of medication management strategies for seniors, and the need for communication between health care providers regarding seniors’ drug regimens.

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Engaging patients on social media platforms: exploring health and information exchange processes

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Social media platforms offer new ways for patients to become more involved in their own health care but little is known about what these platforms are trying to achieve, for whom they are designed, and how they attempt to achieve their goals. We present a framework to study these issues. Since no existing frameworks were identified in the literature to analyze platforms, a review of the literature on patient engagement and patient roles in treatment decision-making was conducted to inform a preliminary framework to guide data collection and analysis. Qualitative methods were used to analyze textual and visual data (e.g., platform homepages and other relevant website pages, policies and rules, patient tools and user profile features) collected from a convenience sample of social media patient platforms. A preliminary framework was developed based on a literature review and pilot analysis. This framework draws from 1) the U.S. National eHealth Consortium patient engagement framework that incorporates meaningful use policies (inform me, engage me, empower me, partner with me, and support my eCommunity), 2) the Health Council of Canada’s spectrum of engagement (inform, consult, involve, collaborate, empower), 3) preferred patient roles in treatment decisions (passive, shared, autonomous and collaborative) and 4) technology enabled knowledge sharing modalities (medical knowledge, experiential patient knowledge and co-created knowledge). Preliminary results from applying this framework will be presented. Since social media platforms can influence how health issues are managed, a better understanding of how they engage patients can contribute important insights to inform future patient engagement approaches. We propose a framework for analyzing social media platforms that we plan to employ in future research.

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Examining interventions to address the transition gap: A systematic review of youth to adult mental health services

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Navigating a health system can be a challenging experience for many, especially when moving between health system services, as is the case for youth who transition out of child and adolescent mental health services (CAMHS). The aims of the study are to assess the peer reviewed evidence on services/programs aimed at addressing youth to adult transitions in mental health services. A systematic review of academic literature Findings indicate little coordination exists between AMHS and CAMHS systems, and that few transition programs for youth with mental disorders have been evaluated in academic literature. Greater integration within the mental health system itself, particularly between CAMHS and AMHS, is needed. Since neither CAMHS nor AMHS were reported to regularly communicate with each other in these studies, a mechanism that facilitates this process may have the highest potential for smoothing transitions Set up costs, however, may be prohibitive. The primary limitation of these results is that the quality of evidence reported in the published articles limits the application of the findings. The lack of research on the coordination and effectiveness of programs creates uncertainty as to whether youth with mental disorders are receiving all the help they may need or that they would benefit from during their transition period.

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Geriatric Syndromes Predict Postdischarge Outcomes Among Older Emergency Department Patients: Findings from a Multinational Cohort Study

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Identifying older emergency department (ED) patients with clinical features associated with adverse outcomes may lead to improved clinical reasoning and better patient targeting. The objective of this study was to identify and compare geriatric syndromes that influence the probability of post-discharge outcomes among older ED patients from a multinational context. A prospective cohort study of ED patients aged 75 or older was conducted in 13 ED sites from 7 countries. Of the 2,475 patients approached for inclusion, 92.2% were enrolled. Patients were assessed at ED admission with a geriatric ED assessment. Outcomes were examined for patients admitted to a hospital (62.9%) or discharged to the community (34.0%). Hospital length of stay and discharge to higher level of care was recorded for admitted patients. Any ED or hospital use within 28 days of discharge was recorded for patients discharged. Standard and multi-level logistic regression was used. A multi-country model including living alone (OR=1.78, p=<0.01), informal caregiver distress (OR=1.69, p=0.02), deficits in ambulation (OR=1.94, p=<0.01), poor self-report (OR=1.84, p=<0.01), and traumatic injury (OR=2.18, p=<0.01) best described older patients at risk of longer hospital lengths of stay. A model including recent ED visits (OR=2.10, p=<0.01), baseline functional impairment (OR=1.68, p=<0.01), and anhedonia (OR=1.73, p=<0.01) best described older patients at risk of proximate repeat hospital use. A sufficiently accurate and generalizable model to describe the risk of discharge to higher levels of care for admitted patients was not achieved. Despite different health care systems, the probability of long hospital lengths of stay and repeat hospital use among older ED patients is detectable at the multinational level with moderate accuracy. This demonstrates the potential utility of incorporating common geriatric clinical features in routine examination and disposition planning for older patients.

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Human development focusing on access to health care of South Asian immigrants living in the Greater Toronto Area (GTA)

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The objective of this interdisciplinary research was to investigate the access to health care from a holistic perspective. The study investigated the barriers South Asian immigrants face in accessing health-care services, education and employment opportunities in the Greater Toronto Area (GTA) needed for maximizing their well-being and human development. The research uses a cross-sectional research design. Using the convenience sampling technique, a sample of 307 self-administered survey questionnaires and five focus group discussions from the volunteers of South Asian immigrants living in the GTA were collected. To analyze and measure human development, this research used Amartya Sen's capability and freedom approach that considers human development as a process of expanding people's choices and opportunities which could enhance their capabilities and freedoms for their quality of life and human development. Access to health care is one of the significant components contributing directly to that quality of life and human development. The results showed that South Asian immigrants experienced multiple barriers to access health, education and employment opportunities in the GTA. Using the SPSS software, this research tested the hypotheses, conducted cross-tabulation, chi-square tests and Cramer's V; the results show that there are statistically significant associations between South Asian immigrants' self-rated health before and after coming to Canada; between self-rated health and access barriers; and between access barriers and capabilities and freedom variables. The results also show that South Asian immigrants' self-rated health declined after living some time in Canada because of the barriers/challenges to accessing health-care opportunities in the GTA. The study also confirmed that access to health care challenges/barriers is limiting the South Asian immigrants' growth of capabilities and freedoms and quality of life. As a result of access barriers, immigrants' health is deteriorating and their human development is being compromised. Immigrants' access to health-care, education and employment should be considered a priority for their health, well-being and growth of capabilities and freedom; then they can contribute and fully participate in our society.

Implementing a new school-based occupational therapy service delivery model: What do stakeholders say about access, service quality, and sustainability?

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Partnering for Change (P4C) is a school-based occupational therapy service delivery model for children with a chronic health condition called Developmental Coordination Disorder (DCD). Currently being evaluated in 40 Ontario schools, this study identifies stakeholders' perceptions of the implementation process and outcomes, with an emphasis on factors influencing P4C's sustainability. Between December 2013 and June 2014, individual interviews were conducted with 5 occupational therapists (OTs), 14 school board managers and principals, 12 health care managers, and 3 research team members. Audio files were transcribed verbatim and entered into QSR NVivo 10 ©. Content analysis was completed using an implementation science framework. Comments relating to the implementation and sustainability of P4C were extracted to identify recommendations for expansion of P4C. In addition, 15 OTs completed daily logs to document services provided to children with DCD as well as requests to provide services to other populations of children. All stakeholder groups perceived P4C to be an effective service delivery model increasing access and service quality for children with DCD and, potentially, for children with other chronic conditions. For managers, expanding P4C to other populations of children was considered more equitable and necessary to sustain P4C financially. Partnership with schools was a key factor for success. School stakeholders commented that it was helpful to have an OT as part of their team – to have someone who could problem-solve quickly without requiring a formal referral or a specific diagnosis. OTs were asked to see children with varied needs; they offered 3329 individual sessions to 592 children with coordination difficulties, and were requested to see 435 children with other conditions (70% of whom did receive service). Stakeholders perceived P4C to be an efficient service delivery model and suggested that effective and sustainable service delivery should be responsive to the needs of all children. Their comments highlighted the many changes and the support required at different levels to implement this kind of model.

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Inequality by Race/Ethnicity in Survival Improvement of Children with Acute Lymphoblastic Leukemia in the United States and Canada

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Childhood acute lymphoblastic leukemia (ALL) survival improved dramatically from 5-year survival of 15% in 1960s to over 80% in late 1990s; whether the ongoing improvement has nullified inequalities in ALL survival between children of different race/ethnicity groups and whether there is inequality between US and Canadian children is unknown. Children aged 0-19 years who were diagnosed with a first primary malignant ALL in 1975-2010 participating in one of nine cancer registries in the Surveillance, Epidemiology and End Results program (SEER) were included. Race/ethnicity was classified as White, Black, Hispanic, Asian/Pacific Islander (API), and American Indian/Alaska Native (AIAN). Age was categorized as <1, 1-9 and 10-19 years. Kaplan-Meier methods were used to estimate overall 5-year survival. Multivariable Cox regression analyses were applied to estimate hazard ratios (HRs) and their 95% confidence intervals (CI) by prognosis groups and diagnostic periods. Canadian survival statistics were obtained from the Canadian Cancer Registry's publications. Survival improved in each race/ethnicity over past 3.5 decades with different magnitudes, resulting in change of inequality patterns. Compared to White children, adjusting for age and sex, the ALL-related-mortality hazard ratio (HR) in Black children dropped to 1.21 (95% CI, 0.74-1.96) in 2000-2010 from the largest inequality in 1984-1991 (HR=2.09, 95% CI, 1.57-2.79). In Hispanic children, the HR increased from 1.28 (95% CI, 0.98-1.66) in 1975-1983 to 1.95 (95% CI, 1.48, 2.58) in 2000-2010. API and AIAN children had HRs of 1.39 (95% CI, 0.92-2.11) and 2.31 (95% CI, 1.13-4.74), respectively, in 2000-2010, which did not change as greatly. Canadian children had five-year survival of 84% in 1994-1998 and 91% in 2004-2008, comparing to US-SEER White children of the same period (87% and 93%, respectively). Survival inequalities in children of different race/ethnicity remain appreciable in the US. While survival improvement over a decade between 1990s and 2000s appears similar between US White and Canadian children, the absolute 5-year survival remains slightly lower in Canadian children. Proper interventions need to be developed to reduce these differences.

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Integrating Health Technology Reassessment into a Complex Healthcare System: Diverse Perspectives from Stakeholders in Alberta Health Services

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Health technology reassessment (HTR) is an emerging policy approach that examines whether existing technologies are being optimally used. Little practical implementation experience with HTR exists in Canada or internationally. The objective of this research is to understand, through practice, how HTR can be integrated into a complex Canadian healthcare system. Qualitative research methods were used to develop an understanding of the context within which the Alberta HTR initiative was embedded. Alberta Health Services (AHS), the province-wide healthcare delivery organization in Alberta, has committed to advancing HTR activities through its strategic clinical networks (SCNs). This provided a unique opportunity to study the integration of HTR in practice. Semi-structured telephone interviews with AHS stakeholders were conducted from May-August 2014. Relevant documents were also reviewed. Perspectives on current SCN activities, particularly the perceived facilitators and barriers to conducting HTR, were collected. Data was analyzed thematically using standard qualitative data analysis methods. Twenty-two interviews were completed. Preliminary data revealed variable understanding of the practice, language, and purpose of HTR. A number of stakeholders interchanged descriptions of HTR activities with quality improvement or rationing exercises. There was little understanding of how and/or what to measure in order to value existing technologies. While most stakeholders within SCNs supported the conduct of HTR initiatives, those external to the SCNs (academic partners or operational leaders) reported challenges with communication and partnering to ensure alignment of new HTR activities with existing priorities and initiatives. Many also described experiencing initiative overload. Lastly, despite mixed perspectives of discussing money alongside quality of care and/or patient outcomes, many stakeholders felt that the potential for reinvestment, subsequent to HTR, was critical for incentivizing future HTR activities. While there is broad support for HTR, a number of barriers hinder its successful uptake. Interdisciplinary stakeholder consultation in development phases, purposeful alignment with other initiatives, education to improve conceptual understanding and development of better measurement and analytical capacity are among key considerations suggested to advance the HTR agenda provincially.

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Le raisonnement clinique des ergothérapeutes en Soutien à domicile : importance des aspects administratifs et organisationnels dans le choix des interventions offertes aux clients

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Les aspects contextuels (légaux, administratifs, organisationnels) peuvent influencer le choix des interventions des ergothérapeutes en soutien à domicile (SAD), ce qui relève de leur raisonnement clinique (RC). Or, les aspects contextuels impliqués dans le RC des ergothérapeutes en SAD sont peu connus. Cette étude visait à décrire ces aspects contextuels. Un dispositif qualitatif de type ethnographie institutionnelle (EI) a été utilisé auprès de dix ergothérapeutes recrutés dans trois programmes de SAD québécois. Des observations (n = 41 jours) et des entretiens semi-dirigés, informels (n = 206 entretiens; 16 heures et 29 minutes) et formels (n = 10 entretiens; 12 heures et 6 minutes) ont été réalisés avec ces ergothérapeutes. Douze informateurs-clés secondaires (collègues, gestionnaires) ont également été rencontrés (n = 22 entretiens) et des documents administratifs (n = 50) ont été recueillis. Les données ont ensuite été analysées selon le processus analytique de premier niveau de l'EI. Parmi les 13 aspects identifiés, trois administratifs et deux organisationnels sont impliqués quasi constamment dans le RC des ergothérapeutes. Parmi les aspects administratifs, les consignes, l'offre et la continuité de services réfèrent aux règles et critères d'octroi des services, à leur offre ou non par l'établissement et au parcours de soins du client. Les aspects organisationnels sont les interventions attendues de l'ergothérapeute (rôle) et les délais d'accès aux services. Lors des interventions, les 13 aspects modulent comment les ergothérapeutes formulent le problème, envisagent les solutions et prennent les décisions. Spécifiquement, le problème à résoudre est formulé en fonction principalement d'aspects contextuels plutôt que des besoins du client. Les aspects administratifs et organisationnels occupent une place importante dès les premières étapes du RC des ergothérapeutes, influençant les services offerts aux clients. Ainsi, afin d'avoir l'effet escompté, les lois et règlements, notamment en matière de services, devraient être supportés par des dispositions administratives et organisationnelles cohérentes.

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Learning from each other to promote the health of older stroke survivors through an integrated community-based stroke rehabilitation team supported by a mobile health solution

NANCY MATTHEW-MAICH Professor, Mohawk College

The purpose of this study was to co-create a mobile health (mHealth) technology-based solution with a team of community-based interprofessional healthcare providers and decision makers to support evidence-informed, person-centered care and community re-integration of older adult stroke survivors with multiple chronic conditions. A qualitative descriptive and user-centred design approach was used to build the mobile application. Interviews and focus groups were conducted with 41 healthcare providers including nurses, care co-ordinators, personal support workers, occupational therapists, physiotherapists to identify current challenges for community-based stroke care in Ontario, Canada. Additionally, ten consultations were completed with 23 key stakeholders (e.g., Heart and Stroke Foundation, Stroke Network, OHCA, OACCAC, etc.) involved with Canadian stroke rehabilitation to capture insights into current gaps in community care. Feedback was offered iteratively throughout the design and build process related to the technology co-creation. The following current barriers to community-based stroke care were identified by stakeholders: 1. fragmented communication between healthcare providers; 2. no consistent means to track patient status; 3. limited access to information and resources at the point-of-care, 4. safety issues resulting from communication gaps; and 5. a lack of consideration of MCC in common best practice guidelines. The solution designed was a mobile app, "My Stroke Team" (MYST), completed in November 2014. It supports best practice implementation in stroke care through: 1) real-time, secure, communication within the full circle of care (including client and family caregivers); 2) evidence-informed safety assessments; 3) alerts to relevant providers regarding changes in client status; and 4) access to resources and providers. The success of this innovation was engagement of end-users using an iterative process. MYST has the potential to bridge communication and safety gaps in home healthcare, ultimately improving quality of care for stroke survivors and their families. MYST will be pilot tested in Ontario within an interprofessional community intervention study.

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Mapping TB treatment availability for refugees and migrants in Tak province, Thailand

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Tuberculosis (TB) is curable but requires treatment. In Thailand public and non-governmental organizations provide free or low cost TB treatment to migrants and refugees. The objective of this research is to examine the availability of TB treatment services for migrants and refugees in a province that borders Myanmar. Fieldwork was conducted in Thailand to examine how refugees and migrants access TB treatment. Data was collected through qualitative focus group discussions and key informant interviews. Following data analysis locations of TB treatment providers were plotted on a map with details on which group could access treatment. Separate maps were created to show treatment availability for TB, TB/HIV co-infection and multidrug-resistant TB. The results show that access to services is highly fragmented and is closely linked to legal status. For example, refugees have access to services that are provided specifically for refugees. Migrants who are part of the government health insurance scheme can receive low cost treatment at Thai government facilities. Non-governmental organizations have TB treatment facilities specifically for migrants. There are some referrals between these systems. Comparisons of the maps show that there are few providers for multidrug-resistant TB. In conclusion, in regions with independent health systems mapping treatment availability may be a useful tool for stakeholder discussions on healthcare planning.

Measuring Triple Aim Results for a Suburban-rural Population by an Alberta Primary Care Network

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To examine the extent that Triple Aim results are achieved by the Westview Primary Care Network (WPCN)—a physician-operated primary healthcare (PHC) organization servicing an Alberta suburban-rural community; Describe the measures and tools used; Report on results; and Identify barriers to measuring Triple Aim outcomes by community-based PHC organizations. Since inception in 2005, WPCN targets achieving Triple Aim objectives—improve population health status, enhance patients' experience of care and reduce per capita healthcare cost. Implementation of an Inter-professional Collaborative Practice model of care across member family practices provides a one-stop team-based approach to primary/secondary prevention, early intervention, chronic disease management and complex care. Health status (RAND36/SF12), health behaviors (tobacco, diet, exercise, sleep, alcohol/drug use), care quality (PACIC and Starfield's PCAT) plus satisfaction data—collected via multi-year population and patient surveys provide measures for first two Triple Aim objectives. ED visit frequency is used as proxy measures of cost savings. For the Westview population between 2007 and 2013, Health status has improved—mean RAND36/SF12 scale scores had increased: General Health (69.71 Vs 72.33); Physical (73.23 Vs 76.17); Vitality (53.5 Vs 61.73). Health behaviors have changed positively: % "Not Smoking At All" (69.2 Vs 76.8); % "Exercise 30-minutes 3-4 times/week" (25.7 Vs 28.6); CAGE Score (.16 Vs .16). Patient experience with quality of care received has been augmented in: PCAT Summary Scores (3.21 Vs 3.38) and Access (2.21 Vs 2.53); Patient Assessment of Chronic Illness Care (PACIC) and satisfaction ratings remain high. ED Visit Frequency: Population Self-reported .9 Vs .7 visits/past 12-months; HQCA-reported GPSC Visits/patient - 0.133 Vs 0.088. Cost Savings: WPCN-Administrative Records – Average Number of ED visits-avoided/annum is 4,090; Total for 2008-2014 is 20,448 visits. WPCN has achieved its expected Triple Aim outcomes. However, inability to access population and system-level administrative data prevents meaningful segmentation of PCN populations for target service planning; and disables tabulations of per capita costs. Real-time and system-level data must be available for PHC organizations to realize their Triple Aim goals.

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Meeting the Health Service Needs of Urban Aboriginal Women for Co-occurring Diabetes, Mental Health and Addiction Issues

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Frequent service users are more likely to have co-morbid health conditions including a combination of chronic physical and mental health conditions. There is a higher existence of co-occurring mental health with chronic physical health conditions involving addiction among Aboriginal Peoples of all ages and gender. Women are more likely than men to have co-occurring health conditions. But how this is experienced specifically by Aboriginal women living in urban settings is largely unexplored. This poster will begin to map out an ongoing study of urban Aboriginal women's health service needs for co-occurring diabetes, mental health and addiction. Our methodological approach consists of three forms of primary data collection: one-on-one semi-structured interviews, surveys, and follow up deliberative focus group discussions across two phases. In the first phase, we collect data from key informants (n= 8-12), including health and social service providers and decision makers. This is followed in the second phase of data collection from urban Aboriginal women (n= 24- 36). Results from the first phase of this study reveal that separate and parallel mental and physical health treatment options do not offer interventions that are accessible, integrated and tailored for Aboriginal women dealing with co-occurring health conditions. Thus necessitating the use of holistic approach by combining Indigenous perspectives with gender sensitive and trauma-informed practice to address the interconnected risk factors for co-occurring chronic physical and mental health challenges, and addiction; linked to wide-based supports in housing, education, employment, recreation and the wider social network. Ensuring women's safety has been identified as the key health service component. Collaboration and service integration is necessary across the sectors. The findings reported here are from a localized study, therefore can not be generalized. However, there is a clearly identified need for integrated service provision approach based on Indigenous understanding of holistic care; and community development through awareness and education about co-morbid health conditions among Aboriginal Peoples, providers and general public

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Methods to define hypertension in electronic medical record-validation against national survey data

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To evaluate the role of hypertension diagnosis codes, antihypertensive drug prescriptions, and blood pressure records in identifying hypertension patients in electronic medical records. This study was to propose an appropriate hypertension case definition for surveillance and health services research. We included all the patients actively registered in The Health Improvement Network (THIN) database, UK, on December 31, 2011. Three case definitions using diagnosis code, antihypertensive drug prescriptions, and abnormal blood pressure records respectively were employed to identify hypertension patients in THIN. We examined the clinical characteristics of patients with hypertension for each definition and compared the prevalence and treatment rate of hypertension in THIN with results from Health Survey of England (HSE) in 2011. Nearly all the cases defined by diagnosis code were also identified by the definitions using antihypertensive drug prescriptions and/or abnormal blood pressure. Compared with results from HSE, use of diagnosis code alone underestimated hypertension prevalence. Use of any of the definition or combination of antihypertensive drug prescriptions and abnormal blood pressure had higher prevalence than HSE. Use of diagnosis code or abnormal blood pressure with a 2 year period had similar prevalence and treatment rate of hypertension with HSE. We recommended the use of "diagnosis code or 2 abnormal blood pressure records with a 2 year-period" to conduct hypertension surveillance in THIN for international comparisons. Different methods might be used based on study purposes.

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Monitoring Drug developments: A Multifaceted Approach

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The objective is to monitor new drugs before they arrive on to the Canadian market to identify those products likely to have an impact on future drug plan expenditures. The New Drug Pipeline Monitor (NDPM) identifies drugs in late-stage clinical trials using a specialized BioPharm Insight® database and decision-tree algorithm. A top-ten list of innovative drugs likely to have a clinical impact is published, along with therapeutic areas with research activity.The New Drug Launch Monitor (NDLM) identifies drugs marketed in other countries but not yet sold in Canada, using sales data from the IMS/Brogan Midas database for all drugs marketed in the PMPRB list of seven comparator countries. These countries include France, Germany, Italy, Sweden, Switzerland, the UK and the US. Information from Midas on jurisdiction, launch date and manufacturer was used to establish the launch sequence of each drug. The NDPM, 6th edition identified 11 pipelines drugs, 3 of which are biologics. The results indicate the pipeline continues to be strong for cancer and biologic drugs, while clinical trials for bacteria-resistant infectious drugs and other classes are promising.The NDLM identified 92 new drugs launched internationally between 2008 and 2013. While less than half have found their way on to the Canadian market, those that were introduced were large market drugs, with significant demand. In addition while most new drugs were launched first in the US, marketing in Canada typically occurred shortly after and was often second or third in the sequence of market release. The analysis contained in these two reports provides meaningful intelligence on new drug products from late-stage clinical trial through to market launch.

Mortality Belief, Individual Health Shocks and the Decision to Smoke

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This paper tries to understand the relationship between individuals' subjective estimate of their susceptibility to smoking and their decisions to smoke. And it investigates how individual's smoking related health shocks affect their subject belief of susceptibility to smoking and promote cessation behaviour. I develop a two period decision model of smoking. I derive two testable hypothesis about private health shocks and individual's belief of susceptibility to smoking from the model. They are: (1). Smokers adjust their survival belief downwards more compared to non-smokers when receiving smoking related health shocks. (2) The level of survival belief correlates positively with the quitting decision. I use data from the Health and Retirement Study (HRS) to test these hypotheses. I also estimate a dynamic discrete choice model of smoking. (In Progress) I implement an approach similar to difference in difference (DID) to test the first hypothesis. The dependent variable is the change in survival belief to age 75 in two adjacent waves of HRS survey. I find that the difference in this variable between smokers who received smoking related health shocks or not is significantly larger than that of non-smokers. The joint F test for smoking related shocks is significant at 1 percent level. For the second hypothesis, I implement a probit regression. The dependent variable whether a smoker quits smoking in the next wave of survey. The regression suggests that the level of survival correlates with the quitting decision positively and significant. Combining the two results together, I find individual's health shocks promote smoke cessation via getting a more precise understanding of their own susceptibility to smoking. Despite years of public anti-smoking campaign, smokers still have an overly optimistic belief of susceptibility to smoking. Private health shocks serve as an efficient tool for smokers to correct their belief and promote cessation. Policy makers can mandate preventative health check-ups for smoking related health shocks to promote cessation behaviors.

Optimiser la performance des ergothérapeutes dans les programmes de soutien à domicile québécois : impacts sur le raisonnement clinique et les interventions offertes

ANNIE CARRIER Ergothérapeute, Université de Sherbrooke

Les processus d'optimisation de performance cherchent l'efficience accrue des services ergothérapiques en soutien à domicile (SAD). Or, l'implication de ces processus dans le raisonnement clinique (RC) menant au choix des interventions est peu connue. Cette étude visait à explorer l'implication des processus d'optimisation dans le RC des ergothérapeutes en SAD. Un dispositif qualitatif de type ethnographie institutionnelle (EI) a été utilisé auprès de dix ergothérapeutes recrutés dans trois programmes de SAD québécois. Des observations (n = 41 jours) et des entretiens semi-dirigés, informels (n = 206 entretiens; 16 heures et 29 minutes) et formels (n = 10 entretiens; 12 heures et 6 minutes) ont été réalisés avec ces ergothérapeutes. Douze informateurs-clés secondaires (collègues, gestionnaires) ont également été rencontrés (n = 22 entretiens) et des documents administratifs (n = 50) ont été recueillis. Les données ont ensuite été analysées à l'aide du processus analytique de l'EI. Le RC des ergothérapeutes inclut une préoccupation constante quant à leur efficience, ce qui module leurs évaluations et leurs interventions auprès des clients. Spécifiquement, les ergothérapeutes restreignent le temps et le suivi alloués à chaque client. Leurs évaluations et, conséquemment, leurs interventions, se limitent le plus souvent au seul motif de référence, généralement l'autonomie dans les soins personnels, sauf si la sécurité du client est menacée. Par la catégorisation des activités qu'ils requièrent, les processus d'optimisation génèrent également une lourdeur cognitive pour les ergothérapeutes. La mesure du travail utilisée dans ces processus devient l'étalon pour évaluer la légitimité de leurs activités et génère des comportements déviants afin de rencontrer les objectifs de performance. La restriction de leurs interventions ne correspond pas à la formation universitaire des ergothérapeutes en SAD. Des questionnements sont soulevés quant à la qualité des services qu'ils rendent, l'étendue des services offerts aux clients et l'impact des processus d'optimisation sur l'atteinte des objectifs du système de santé.

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Patterns of care: identifying and describing pathways during episodes of care for chronic obstructive pulmonary disease exacerbations

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Patient healthcare pathways affect resource use and outcomes. Defining care pathways may be challenging because patients often exhibit heterogeneity in their healthcare service use. The study objective was to apply a probability-based approach to identify and describe care pathways for chronic obstructive pulmonary disease (COPD) patients. This population-based study used administrative databases from two urban health regions in Saskatchewan to identify a newly-diagnosed COPD cohort (35+ years) and define the index episode of healthcare use for COPD exacerbations between 2007/08 and 2011/2012 fiscal years. Latent class analysis classified the cohort into homogeneous healthcare pathway groups using measures of healthcare use in the episode: general practitioner (GP) visits, specialist visits, emergency department (ED) visits, inpatient hospitalization, and outpatient medication dispensation. Logistic regression was used to model demographic and disease characteristics associated with pathway membership. Differences in resource use between class members were tested using pseudo-class random draws. The cohort consisted of 3,105 individuals. Healthcare use during the index episode was characterized by two distinct pathways: high user (15.2%) and low user (84.8%). The high user pathway was generally initiated by an ED visit, continued by specialist visits, and ended with GP visits. The low user pathway was typically initiated and ended with GP visits and included medication dispensations. Urban residence (odds ratio [OR] = 1.99, 95% CI 1.71 to 2.27), female (OR = 1.24, 95% CI 1.06 to 1.42), and 1+ comorbidities (OR = 1.42, 95% CI 1.21 to 1.63) were associated with high user class membership. Compared to the low user class, the average index episode cost of the high user class was significantly greater ($12,362 vs $2,836; p-value < 0.001). The findings suggest that a probability-based approach is useful for defining care pathways and profiling patients with different pathways. The high user pathway group, with the description of their characteristics, could be targeted for disease treatment or management interventions. The model could be applied to other complex health conditions.

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Perceived need, service use and unmet need for health services amongst a sample of socially marginalized people who use drugs

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Estimating perceived need for care among people with addiction and mental health problems is an important component of system and service planning. Several general population studies have developed these estimates, and demonstrated high levels of unmet need. To complement this work, we measured perceived needs amongst socially marginalized drug users. We administered a structured survey to 324 socially marginalized people who use drugs. Participants were recruited from two inner-city social and health service providers in Edmonton, Alberta. Surveys lasted 40-60 minutes and assessed demographic, substance use, and health status measures as well as the Perceived Need for Care Questionnaire (PNCQ), a structured instrument designed to quantify several dimensions of perceived need for services (information, medication, hospitalization, counselling, social interventions, skills training, and harm reduction). Descriptive and inferential statistics were used to describe patterns and correlates of perceived need, unmet need, service use, and access barriers. Preliminary analyses indicate high levels of medical and social complexity in the sample, with approximately 57% reporting unstable housing, and 90% reporting injection drug use in the previous six months. Additionally, 61% met criteria for past year heavy drug dependence, and 43% for past year mental health and addiction comorbidity. Only 20% of participants reported having their care needs fully met. Significant unmet need was reported across seven service categories with the largest unmet needs being for social interventions (59%) and counseling (47%). Analysis of demographic and clinical correlates of perceived need for care and service access is ongoing. The results of this work, and a description of unmet need for care and self-reported access barriers will be presented and discussed. Socially marginalized people who use drugs experience high rates of addiction and mental health problems and despite high levels of perceived need, report significant unmet needs for care. Results indicate that measuring perceived needs for health services in hidden, high-needs populations is feasible and useful for improving system planning.

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Perspectives en matière de soins de santé selon le public et les fournisseurs et gestionnaires des soins de santé : résultats du sondage sur les soins de santé au Canada 2014

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Nous rapportons les résultats de la onzième édition du sondage sur les soins de santé au Canada (SSSC) sur les perspectives en matière de soins de santé selon le public et les fournisseurs et gestionnaires des soins de santé. L'enquête a été menée par un institut de sondage professionnel au moyen d'entrevues téléphoniques auprès d'échantillons nationaux représentatifs de gestionnaires (n=104) et professionnels de santé (101 médecins, 100 infirmières et 100 pharmaciens) et de sondage en ligne de membres du public (n=1000) sélectionnés de façon aléatoire d'une base de sondage entre le dernier trimestre 2013 et le premier trimestre 2014. Une variable de pondération basée sur les distributions de l'âge et du sexe des données du recensement de 2011 a été définie pour tenir compte des poids régionaux. Les maladies cardiovasculaires et l'arthrite sont les affections chroniques les plus répandues (22%), suivies par les maladies mentales (16%), pulmonaires (14%) et diabétiques (11%). Les temps d'attente, l'accessibilité, le vieillissement, le coût élevé et le manque de médecins apparaissent dans le top trois des défis du système des soins de santé selon le public et les professionnels mais pas dans le même ordre de priorité. Pour améliorer l'accès, le public suggère principalement 1) d'augmenter les inscriptions dans les écoles de médecine et de soins infirmiers et 2) d'exiger que les professionnels de la santé travaillent en équipe avec d'autres types de fournisseurs de soins de santé. Avec le vieillissement de la population et l'augmentation de la prévalence des maladies chroniques, l'accès en temps opportun aux soins demeure la première préoccupation du public et des professionnels de la santé. Le développement de programmes d'autogestion et d'une plus grande implication des patients dans la gestion de leur santé constituent des pistes de solution.

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Physicians Reaching Out: Supporting Youth Mental Health in British Columbia

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The objective of this physician-led initiative was to develop policy on youth mental health, and to raise awareness among youth, families, teachers, and physicians about mental health generally, how to recognize mental illness, and where to seek help when it is needed. The policy development process involved a two-pronged approach. An initial literature review and environmental scan helped to identify the policy gap and opportunities. Following this, a stakeholder forum was convened to seek input on a number of key questions relating to building awareness of youth mental health. Forum attendees included representatives from the Ministries of Health, Education, and Children and Family Development, Health Authorities, and various mental health organizations. A meeting was also held with youth with lived experience of mental health issues to seek their feedback on barriers to seeking help and how to best connect with youth. It is estimated that 12-20% of transition-age youth (15-24 years) in British Columbia suffer from mental illness but the majority of these youth will not seek help. Barriers to seeking help include a lack of understanding about mental health and how to recognize mental health problems, a lack of awareness about where to seek assistance and how to navigate the mental health system, and the stigma attached to mental illness. One of the key findings as a result of meeting with stakeholders is that many youth are not aware that they can speak to a physician about their mental health concerns. There is an opportunity for physicians to raise awareness of the role they can play, alongside other health providers, in addressing the mental health needs of youth, and to also raise awareness of existing mental health tools and resources. A major component of this initiative was developing a website information hub.

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Predictors of hospital discharge to continuing care: exploring the role of kidney function

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Identifying factors (e.g. level of kidney function) relating to discharge to continuing care is important for informing hospital discharge planning, particularly for patients transitioning from nephrology inpatient units to primary care. Our objective was to determine predictors of hospital discharge to continuing care among older adults. This is a retrospective cohort study using laboratory and administrative data from Alberta, Canada. We identified patients aged ≥66 years with ≥1 hospitalization between 2005 and 2010 (index date: first hospital admission). The outcome was hospital discharge to continuing care (another facility providing ongoing care by medical providers) compared to hospital discharge home with support services (indicating independent patient function with community services provided when necessary). Predictors examined by logistic regression include estimated glomerular filtration rate (eGFR), proteinuria measurements, socio-demographic factors, comorbidities, and hospital factors. This study included 43,801 patients (mean age 81.3 (SD 8.01) years; 60.3% females). Patients with mild to moderately decreased kidney function (eGFR 45 to 59 mL/min/1.73m2) had lower odds of hospital discharge to continuing care compared to those with higher kidney function (e.g. age 66 to 74 years: OR 0.77, 95% CI 0.63-0.94). Patients with urgent hospital admissions had higher odds of discharge to continuing care (e.g. age 66 to 74 years: OR 3.67, 95% CI 3.09-4.37). Dementia was the strongest predictor of the outcome across all age groups (e.g. age 66 to 74 years: OR 8.46, 95% CI 7.33-9.77). Other major predictors were paralysis and cerebrovascular disease. Decreased kidney function was associated with reduced odds of discharge to continuing care, while baseline cognitive and physical dysfunction and unplanned admissions were strong predictors. Future studies to explain this finding and to examine the relationship between kidney function and other discharge dispositions are needed to inform hospital discharge planning.

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Primary care provider perceptions of the challenges of managing patients with mental-physical multimorbidity: a qualitative study

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Multimorbidity is common in primary care and difficult to manage, but less is known about the specific challenges of managing patients with mental-physical multimorbidity. We aimed to explore primary care providers' perceptions of the everyday challenges of caring for patients living with both mental illness and chronic physical diseases. Qualitative, embedded multiple case study with four primary care clinics within two health and social service centres (CSSSs) in Montreal, Quebec. Clinics were sampled purposively based on survey data from project "Dialogue" to ensure diversity in organizational characteristics of clinics (clinic type, mental health services). Recruitment targeted different types of primary care professionals and proceeded by snowball sampling. Data collection involved individual semi-structured interviews with providers and non-participant observations of study sites. A thematic, inductive analysis was conducted by an interdisciplinary team, facilitated by NVivo. Feedback from participants on preliminary findings was obtained and integrated into the final analysis. Sixteen primary care professionals (e.g. family physicians, nurses, psychologists) identified numerous challenges falling into three overarching themes: patient, provider and healthcare system-related challenges. Patient-related challenges pertained to the the types of mental illnesses patients presented with, the presence of other social problems, and interference from some illnesses on care for others. It could be challenging for providers to build relationships with these patients and they sometimes faced clinical uncertainty and a sense of being stuck alone with complex patients. Participants identified major healthcare system-related challenges, including a lack of integration of physical and mental health services, lack of time to provide adequate care, tensions between access and quality of care, and poor interprofessional communication and collaboration, especially for cases requiring care over longer time periods. Providers reported that patients with mental-physical multimorbidity are very common in their clinics. The challenges they identified in caring for these patients suggests that urgent and targeted actions are needed to improve the organization of primary mental health care services for these patients and particularly to enhance integration of care.

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The Effects Of A Preoperative Educational Dvd On Parental Participation In Recovery Room: A Randomized Controlled Trial

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The objectives of this study were to evaluate the effects of a validated preoperative educational DVD, as a KT tool, on parents' knowledge acquisition, participation and anxiety related to their child's care in the recovery room as well as children's postoperative distress, pain, analgesic consumption and recovery length. A randomized controlled trial was conducted on 105 French and English speaking parent-child dyads whose child was aged 3 to 10 years and underwent an ENT or dental same day surgery at a Canadian pediatric hospital. The experimental group parents (n=49) viewed the DVD and received the standard preoperative preparation and the control group parents (n=56) received the standard preoperative preparation. Parents and children were videotaped in recovery room; parental participation and children's distress were measured using observational scales. A multiple choice questionnaire, a visual analogue scale and a chart review were also used to collect data. T-test, chi-square and repeated measures statistical analyses were conducted. Parents in the experimental group acquired significantly more knowledge (p=0,03) and demonstrated significantly more participation behaviours (p=0,02) related to positive reinforcement, distraction and relaxation than those in the control group. Children's postoperative pain in day-care surgery unit was significantly lower (p=0,02) among the experimental group compared to the control group. There was no significant difference however between the groups with regards to parents' anxiety, children's postoperative distress, analgesic consumption and recovery length. The preoperative educational DVD has encouraged appropriate expectations and enhanced parental roles during children's postoperative recovery and in turn aided to minimize children's postoperative pain. However, further psychological and physical support is required to decrease parents' anxiety and their child's distress.

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The Patient Medical Home: how do Canadian primary care practices measure up to its ten goals?

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The Patient Medical Home is a primary healthcare organizational model promoted by the College of Family Physicians Canada as a way to offer comprehensive, co-ordinated, and continuous care. Ten goals comprise the core attributes of the model. Currently there is no evaluation tool to determine accordance to the model. We are utilizing data from the QUALICOPC study, a cross sectional study of 772 Canadian primary care practices spanning the 10 provinces and 8,332 of their patients. The data consists of information collected on the practice level, the physician level, and the patient level. The survey questionnaires have been mapped to the ten goals of the Patient Medical Home. We are using multi-level linear regression to evaluate how primary care as it is currently being practiced across the Canadian provinces relates to the Patient Medical Home. It is believed that this study will demonstrate that presently many practices across Canada operate on the PMH goals or analogous principles. The outcomes will be relevant for provinces determining primary care reform policies, to note the progress already made in the domains of the PMH goals, and the areas which need improvement. The study will gain baseline measures as to how provinces compare in their ability to measure up to the goals of the PMH, as described by the CFPC. It is hoped the work will establish a novel evaluation methodology inclusive of patient perspectives of care.

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The Role of Education in Colorectal Cancer Screening Participation: Evidence from Canadian Community Health Survey (2011-2012)

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In the context of conflicting evidence, this study was designed to investigate the association between education and colorectal cancer screening participation. Data from the Canadian Community Health Survey (2011-12) was analyzed using multivariable logistic regression among 38,863 respondents. The outcome was derived from: 1) Fecal Occult Blood Test participation; and 2) colonoscopy or sigmoidoscopy participation. Compared to those with education of less than secondary school level, people with post-secondary graduation (OR=1.44, 95%CI 1.25, 1.67), some post-secondary (OR=1.16, 95%CI 0.88, 1.52), or secondary graduation (OR=1.22, 95%CI 1.04, 1.44) had an increase in odds of colorectal cancer screening participation, adjusting for age, sex, income, language, and ethnicity. This study reinforced the positive association between educational level and colorectal cancer screening, which could be useful in designing interventions aimed at improving participation in colorectal cancer screening.

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Trends in Income-Related Health inequalities In Canada: Alcohol-attributable hospitalizations

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Excessive or chronic alcohol consumption can lead to conditions, such as mental and behavioural disorders (e.g., acute intoxication, withdrawal), acute pancreatitis, and liver cirrhosis, requiring hospitalization. This research examines trends in alcohol-attributable hospitalizations between 2006 and 2012, by sex and by neighborhood income level, and highlights potential approaches for reducing alcohol-related harm. As part of a new report on income inequality by the Canadian Institute of Health Information (CIHI), rates of alcohol-attributable hospitalization (excluding injuries and suicides) were generated from 2006 to 2012 for Canadians 15 years and older, by sex and neighborhood-level income quintile. Rates were calculated as discharge rates per 100,000 and standardized to the 2011 Canadian population. Rate ratios and rate differences comparing the highest and lowest income quintiles, as well as population-attributable fractions, were calculated. The academic and grey literature was scanned to identify interventions to reduce income-related inequality in alcohol-attributable hospitalizations. Alcohol-attributable hospitalization rates are over 2.5 times higher among men compared to women, and are highest among Canadians living in lower income neighborhoods. Between 2006 and 2012, rates increased for men and women across all income levels, while income-related inequality persisted. For men, overall rates increased from 133 to 142 per 100,000, while rates among the lowest income quintile remained approximately 2.5 times greater or 140 per 100,000 higher than rates among the highest income quintile. Among women, overall rates increased from 48 to 56 per 100,000, and rates among the lowest income quintile remained approximately 2.1 times greater or 44 per 100,000 higher than rates among the highest income quintile. In 2012, approximately 31% or 8,800 hospitalizations could have been avoided if all Canadians experienced the same rate of alcohol-attributable hospitalizations as the highest income quintile. Despite a range of existing alcohol policy and programming in Canada, alcohol-attributable hospitalizations are increasing and income-related inequalities are persisting. A combination of universal approaches, such as minimum pricing and taxation policies, and approaches targeting higher-risk populations may be required for reducing alcohol hospitalization.

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Understanding the Health Service Use of Colorectal Cancer Screening among First Nations: Describing the Unfolding of a Project

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Colorectal cancer (CRC) is preventable, if detected precancerous through screening and treated. A research project is underway which involves working with First Nations Northern Ontario communities to understand distinct factors influencing CRC screening utilization. Particularly, this presentation will describe some of the specifics of the way this project is unfolding. Participatory action research (PAR) is participatory-based research that is action oriented, and involves using a community-based partnership to plan, apply, and disseminate research. Knowledge translation (KT) involves the collaborative and iterative practice of interactions between researchers and knowledge users to enhance health. PAR and KT are integrated into this research project to guide best-practice methods to better understand this matter from the community's viewpoint. A comprehensive resource, known as the Community Tool Box offers strategies for taking action in communities. Adapted strategies derived from the Community Tool Box are applied in this project to inform the PAR and KT approach. To date, the strategies implemented to inform the PAR and KT approach include those intended to: (1) establish community introductions and buy-in; (2) identify variations between the communities during this process that have emerged; (3) identify the extent to which variations between the communities during this process have emerged; and (4) manage the emerging variations during this process. Essential and useful adapted Community Tool Box strategies that have been implemented in this research project entails an iterative process of: (1) identifying with whom to make initial contact with; (2) developing a plan to reach out to key community members; (3) implementing the plan to reach out to key community members; and (3) learning about the local governance structure of a community. The strategies implemented in this research project are guided by adaptations of strategies from the Community Tool Box. Resources available in this Tool Box are useful and served to inform the PAR and KT plan in the research project.

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Understanding Variations in Health System Efficiency in Canada: A Descriptive Multiple Case Study

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We previously conducted a quantitative study that resulted in the production of efficiency scores for regions across Canada. Expanding on this work, we aim to (1) identify contextual factors that help explain variations in efficiency; (2) identify barriers and enablers; and (3) identify innovations related to health system efficiency. This is a descriptive multiple-case study. Four regions with variations in health system efficiency were selected. Semi-structured interviews will be conducted with policy-makers, senior system planners, managers and clinicians at both the provincial and regional levels representing different health sectors (e.g., acute care, primary health care, public health). Approximately 10-12 interviews will be conducted per region (20-24 per province). Focus groups will be conducted after preliminary analysis of interview results to elucidate some of the themes identified. A document analysis of academic and grey literature will be triangulated with the interview and focus group data. The data collection and analysis will be completed by March/April 2015. This work will highlight contextual factors that may explain regional variation in health system efficiency. It is important to develop methods for measuring efficiency in the Canadian system that make use of available data and measure the most appropriate inputs and outputs for the policy priorities of Canadian decision makers.

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Where’s the 911 for First Nation peoples mental health services in Manitoba?

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We report on findings from a larger study, aiming to identify models of primary healthcare delivery best suited to deliver optimal outcomes in rural and remote communities. We assessed the performance of existing primary healthcare services, using hospitalization for Ambulatory Care Sensitive Conditions. This presentation focuses on mental health findings. We developed a multi-level model that predicts hospitalization for ACSC over time (1984 to 2012) for each resident of First Nation and rural and remote communities in Manitoba on the basis of community and individual-level characteristics. We aggregated the results by community to derive predicted rates of hospitalization episodes, and length of stay. The project sample included all MB residents eligible under the Manitoba Health Services Insurance Plan living on FN reserves (n=72,000 FN), and those living in rural and remote communities (n=280,013) for the years 1984 to 2011. Although the gap is closing, we note that overall rates of hospitalization episodes for ACSC remain higher for First Nations. Looking closer however, we note that rates of hospitalization for ACSC are highest and rising for mental health conditions, compared to acute, chronic and vaccine preventable conditions. The length of stay (LOS) for these hospitalizations is shorter for First Nations. Drilling down further, LOS is similar for acute, chronic and vaccine preventable conditions, but significantly shorter for mental health conditions, suggesting possible premature discharge. Finally, we note that the age of admission for mental health conditions has remained relatively constant in Manitoba, at 41 years of age, whereas the age of admission for First Nations has dropped from 35 in 1986 to 26 in 2010. Our results raise serious concerns about the responsiveness of mental health services for First Nations in Manitoba. Given the documented lack of mental health services accessible on-reserve, levels of social distress associated with a history of oppressive policies and continued practices of infrastructure neglect, these findings are alarming.

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Poster Presentations – Day 2

Présentations d’affiches – Jour 2

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

FONTAINE AB

A Collaborative Approach to Designing Better Care

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Quality cancer symptom management is critical in improving patient outcomes. However, there are gaps in the system. Patient needs are not always addressed and providers often struggle to operationalize symptom management tools designed to support the process. Patients, clinicians, and administrators were brought together to understand barriers and co-create solutions. Patients, clinicians, and administrators from across Ontario were invited to participate in a day-long Symptom Management Summit. Using a design thinking approach, stakeholders engaged in multiple collaborative structured activities, supported by data and designed to encourage critical discussion, creativity, and innovation, while acknowledging both system-level and local concerns and barriers. Collaborations were both cross-disciplinary and cross-regional, and encouraged sharing of both challenges and successes in cancer symptom reporting and management. Patient and family advisors were integrated not only in the initial planning phase of the Summit, but at each activity during the day to ensure their perspective was incorporated throughout. The Summit resulted in a deeper understanding of multi-stakeholder needs and challenges, identified as strategic priorities in improving symptom management across the Province. These priorities have already started to inform system-level change initiatives. Summit outputs also included Regional Quality Improvement Plans, developed and signed at the Summit by senior administrators, clinicians, and patient and family advisors from each of the 14 Ontario Regional Cancer Centres. Regions will be accountable for ensuring implementation of locally-appropriate strategies to improve the symptom management experience for all stakeholders, most importantly patients. Feedback from Summit participants indicated that the design thinking approach was appropriate to meet Summit objectives; and the integration of patient and family advisors into Summit planning and process was identified as a key driver of success. Quality management of patient symptoms involves a multi-disciplinary team of providers together with supportive administration and resources. To understand challenges and identify priorities, all stakeholders must participate in strategic planning for improvement, both locally and across the system. Patients are an essential voice in designing meaningful change.

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A comparison of regulatory policies governing the promotion of prescription medicines by pharmaceutical sales representatives in Canada, France and the United States

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Pharmaceutical sales representative (PSR) visits to doctors can affect prescribing and patient safety. Countries employ various regulatory measures to manage these promotional activities. We examined the barriers and enablers to an effective regulatory framework through a comparative analysis of how regulations work in practice in Canada, France, and the United States. Semi-structured interviews were carried out with 36 key actors/stakeholders in this area of regulation across the three jurisdictions, complemented by a literature review of the regulatory approaches in these countries. Interviewees were recruited using a snowball sampling strategy and represented the regulatory, industry, health professional and consumer perspectives (3 interviewees per group per country). A thematic analysis of transcribed interviews was carried out using the five-step framework analysis approach: 1) familiarization with data 2) identification of a thematic framework 3) indexing 4) charting and 5) mapping and interpretation. This is the first multinational study comparing regulatory experiences in this sector. There are divergent perceptions on the effectiveness of regulations both across jurisdictions and actor/stakeholder groups. Frequently cited concerns from regulators in all countries included the lack of monitoring capacity, the ineffectiveness of enforcement activities, and a scarcity of objective evaluations of regulatory performance. Contrasting opinions were found between regulatory and industry interviewees on how well regulations were protecting public health. Health professional stakeholders were most likely to prefer measures to countervail industry influence by helping improve access to unbiased information, such as academic detailing, while consumer stakeholders cited the lack of visibility of problems arising from inappropriate pharmaceutical promotion as a barrier to raising public awareness and holding key actors accountable. Countries have widely varying regulations on PSR visits, but similar concerns are cited on regulatory effectiveness across jurisdictions. Actors and stakeholders have a variety of perceptions and recommendations, suggesting the need for more focused dialogue between regulators, industry, healthcare professional and consumer groups to identify mutually acceptable solutions to this regulatory issue.

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A Rapid Scoping Review Update For Non-Clinical Interventions For Reducing Unnecessary Caesarean Section

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To perform a rapid scoping review to assess the updated literature on studies assessing the effectiveness and safety on non-clinical interventions for reducing unnecessary caesarean sections with the intention of informing an update for the original Cochrane review published in 2011. We searched the electronic databases - Medline, Embase, Cochrane Central Register of Controlled Trials, Cochrane Library, CINAHL - for potentially relevant articles indexed between March 2010 and August 2014. Potentially eligible articles were single-screened and selected according to the inclusion criteria by all members of the review team, and single data abstraction was performed by all members of the study team using a standardized data extraction form. The electronic search strategy identified 2424 references for title and abstracts screening. Ninety-one articles underwent full-text screening, and eleven references reporting eight studies met our inclusion criteria. Five studies (four randomized controlled trials; 1 quasi-experimental study) described non-clinical interventions specifically targeted at pregnant women or their family members, including two that evaluated the effects of group education regarding mode of delivery on intention for and rate of caesarean section, and three evaluated lifestyle or complementary therapy interventions delivered prior to labour. Three studies (one interrupted time series; two uncontrolled before and after studies) evaluated the use of audit and feedback targeting healthcare professionals. No new studies evaluating financial or regulatory interventions were identified. Interventions to address the rise in caesarean section rates is an international concern and active area of primary research. This scoping review lends support to the original Cochrane review in 2011 and indicates that there are additional reported non-clinical interventions that may also be useful in addressing this global priority.

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Abuse in childhood substantially increases the risk of later depression and anxiety: a systematic review of cohort studies

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Childhood abuse is a major public health and social welfare problem. It is recognized as one of the leading causes of adult mental disorders. We synthesized the research evidence on the potential quantitative effect of reducing childhood abuse on the occurrence of depression and anxiety. Medline, PubMed, Embase, PsycINFO, and Cochrane library electronic databases from 1990 to 2013 were searched for empirical English language cohort studies with criteria for depression, anxiety, and childhood maltreatment. The grey literature on the topic was also searched. Studies that measured maltreatment via recall methods were excluded. Systematic review with meta-analysis was used to synthesize the quantitative effect of childhood abuse on depression and anxiety taking into account study quality. Heterogeneity and publication bias were thoroughly examined. Initial screening resulted in 5,067 articles; 3,340 titles and abstracts were reviewed; 199 papers were retrieved for full text screening. Eight good quality articles satisfied the criteria for analysis. Heterogeneity mandated random and fixed effect models. The pooled odds ratio (OR) between any type of maltreatment and depression and anxiety disorders was 2.03 (95% CI 1.37-3.01) and 2.70 (95% CI 2.10-3.47) respectively. Significant associations were also observed for specific types of maltreatment and depression or anxiety disorders, including physical abuse (OR=2.00, 95% CI 1.25-3.19), sexual abuse (OR=2.66, 95% CI 1.88-3.75), and neglect (OR=1.74, 95% CI 1.35-2.23). Population attributable fractions suggest that over half of global (365 million) and one third of Canadian (1.78 million) depression and anxiety cases are potentially attributable to childhood maltreatment. A 10-25% reduction in child maltreatment could potentially prevent 31.3-80.2 million depression and anxiety cases worldwide and 124,000-325,000 cases in Canada. This systematic review provides robust evidence about the effects of childhood maltreatment on the subsequent incidence of depression and anxiety in adolescence and adulthood. The results of this analysis reinforce the need for health and social services programs and policies aimed at reducing the prevalence of childhood maltreatment.

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Administrative data and Life Course Epidemiology

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Systematic comparisons of the events at different life stages depend on very large number of cases with many variables measured over substantial periods of time. Using high school graduation as an example, this study aims to demonstrate the unique suitability of administrative data to conduct life course epidemiology. Files from the Population Health Research Data Repository at the Manitoba Centre for Health Policy (MCHP), linked across ministries, include information on individual level health and education. A cohort of children born in Manitoba, Canada in 1984-1989 residing in province until age 19 (N = 45 734) were followed to determine the mechanisms by which time-varying predictors influenced the odds of graduating high school. Six distinct models – the full life course model, the accumulation of risk model, the sensitive periods model and three critical period models – were examined for seven time-varying predictor while controlling for a set of background variables. The data proved to give significant insight into how and when events in childhood and adolescence influenced the odds of graduating high school. The models that worked best differed across predictors; each 'group' of predictors was best fit using a different model. The full model worked best for the family instability variables (residential mobility and family structure changes), sensitive periods models worked best for externalizing mental conditions (ADHD and Conduct Disorder/ODD) and the accumulation of risk model worked best for major injuries. Two variables were not significant and were removed from the model. These predictors provided a reasonable fit for the outcome (c-statistic = 0.781, Brier Score = 0.13). This study provides a framework and demonstrates the usage of administrative data to conduct life course epidemiology. Administrative data is an invaluable tool for conducting life course research as it is more cost effective than large scale cohort studies relying on surveys and provide more accurate timing of events.

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Bonus Payments for Avoiding Outside Use in Ontario's Leading Primary Care Capitation Model

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Primary care capitation payments are generally made for a defined basket of services, with some incentive/penalty for discouraging outside use for the same services. Our objective was to examine that incentive in Ontario, the Access Bonus, a payment of up to 18.6% of capitation for avoiding outside primary care use. We used Ontario's administrative datasets that were linked using unique, encoded identifiers. We identified Access Bonus payments in 2012-2013 to physicians in Family Health Organizations, the leading capitation-based payment model. We ordered physicians into quintiles according to the proportion of the maximum possible Access Bonus payment they received, and examined characteristic associated with that earning, including: physician age, sex, country of medical school graduation, years in practice, roster size, and group size; patient age, sex, rurality, morbidity, co-morbidity, area-level income, and immigration status; and, as markers of access, use of after-hours primary care and low-urgency emergency department visits. The median annual payment amount per physician ranged from $35,033 in the highest quintile to $0 in the lowest. Physicians in the highest quintile were more likely to be Canadian medical graduates (82.6% versus 74.9%, p<0.001) and to be male (61.6% versus 55.6%, p<0.001) and were 7.4 times more likely to serve rural areas (66.0% versus 8.9%, p<0.001). Other patient characteristics were similar. In the highest quintile, 14.2% of visits were made after-hours versus 18.0% in the lowest quintile, p<0.001). The rate of low-urgency emergency department visits was twice as high in the highest quintile as the lowest (20.0 per 100 patients versus 10.0, p<0.001) and this pattern remained after urban-rural stratification. High urgency emergency department visit rates were similar across quintiles and urban-rural settings.. In Ontario's leading primary care capitation model, bonus payments for avoiding outside use are substantial in amount and reward rural physicians. Those receiving the highest payment proportion do not provide more after-hours care and do not have fewer low-urgency emergency department visits. These payments may not align with policy objectives.

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Caring is sharing: Provider perceptions of secondary use of anonymized health informatio

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Health researchers and health care professionals are increasingly seeking access to linked and anonymized individual-level patient data, for purposes of research, accountability and improved care. Providers, however,may be reluctant to share patient data. The current research examines when providers are comfortable sharing patient data for purposes of secondary use. Providers may be reluctant to share patient data when they perceive a risk in sharing—but that perception of risks, in relation to benefits or sharing, may not correlate with actual risks and benefits. We survey providers' willingness to share across several variables, including type of record shared, degree of individuation of data, nature of record (electronic versus paper), to whom data is shared with, who benefits from sharing directly, and how familiar the provider is with sharing procedures. Providers (Ontario physicians and residents) were asked to read and respond to six vignettes, where variables of interest were varied and counterbalanced. Recruitment is ongoing (estimated completion: March 2015), but we hypothesize that providers will be more willing to share patient survey responses (relative to medical records), aggregated data sets, such as practice-wide disease rates (relative to individual records), paper records (relative to electronic records), with public institutions, such as university-affiliated researchers (relative to private insurance or pharmaceutical firms), when the patient benefits directly from sharing (relative to when the patient does not benefit directly), and when providers are more familiar with sharing practices. As we move from paper to electronic records, and include mobile devices, email, and wearable technology into care, opportunities to capture, aggregate, and share patient data have increased. Understanding unique challenges for providers to sharing anonymized health records is an important step toward improved research and quality of care.

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Change in Quality of Care Associated with Centralization of Elective Orthopedic Surgery Procedures: A scoping review

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The existing "volume - outcome" approach to centralization disregards the complexity of the process and the potential for multiple outcomes. We aimed to systematically assess the centralization of elective orthopedic surgeries as a complex intervention and determine whether it improves quality of care according to multiple quality dimensions. We searched Ovid MEDLINE, EMBASE, and CINAHL from 1950 to October 2014. Original studies that reported on centralization of elective orthopedic surgeries and its impact on quality of care were included. Interventions for which the effect on quality measures was assessed were considered to be aspects of centralization. Centralization was assumed to be a combination of those. Identified quality measures were matched with the dimensions of Alberta Quality Matrix for Health: accessibility, acceptability, appropriateness, effectiveness, efficiency and safety of care. Using a narrative synthesis approach we combined semi-quantitative results to assess changes in the dimensions of quality associated with centralization. 2958 citations were identified, of those 47 articles satisfied the inclusion criteria. Seven aspects of the centralization process were identified: high number of beds per hospital, high hospital procedure volume, high surgeon procedure volume, surgeon specialization, central hospital location, specialized hospitals/units, and standardization of procedures. None of the included studies assessed all aspects of centralization or all dimensions of care. Four studies assessed the effect of centralization on accessibility; five - on acceptability; two - on appropriateness; two – on effectiveness; twenty-two – on efficiency; and thirty-six - on safety of care. Overall, centralization of elective orthopedic surgeries was associated with improved acceptability, appropriateness, efficiency and safety, however, decreased accessibility and had no impact on effectiveness. Centralization of elective orthopedic surgeries was found to be associated with improvement in four out of six dimensions of quality of care. Complexity of centralization and all associated outcomes must be taken into consideration when drawing conclusions on how the quality of care can be impacted when services are centralized.

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Community general paediatricians' barriers to providing ASD diagnoses: a qualitative study

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Community general pediatricians (CGPs) are often consulted in cases of suspected ASD, and may play a role in increasing ASD diagnostic capacity in the community setting. The objective of this study was to explore the perspectives of CGPs regarding their role in the system of ASD diagnoses using qualitative methods. We performed a phenomenological qualitative study of CGPs' experiences with suspected ASD. Two groups of CGPs were sampled to provide variation in perspectives: CGPs that had referred patients with suspected ASD for a subspecialist assessment, and CGPs that regularly attended ASD educational events. Individual in-depth interviews were recorded and transcribed. Two investigators coded each interview. Thematic saturation was reached when two successive interviews did not generate new codes. Texts were analyzed using a grounded theory approach. A preliminary theoretical framework was summarized and sent to participants with a request for feedback. This feedback was incorporated into the final theoretical framework. Eleven in-depth interviews were conducted (six males, five females). Participants described three elements of assessment: diagnostic determination, communication of the diagnosis, and management of the diagnosis. Diagnostic determination was affected by patient factors (such as age, severity, and comorbidities), family factors (the reliability of the historian), and physician factors (such as training, access to informal expert consultation, and interest in ASD). When communicating the diagnosis, it was important that families know enough, but not too much, about ASD; families who knew too much were perceived to need an "expert" opinion. Participants felt ill equipped to deal with the fragmented service delivery system for ASD. Helping families to access services was time-consuming, poorly remunerated, and less satisfying than other areas of pediatric practice. Though CGPs are frequently consulted on cases of suspected ASD, they experience many barriers to making a diagnosis, leading to increased subspecialist referrals. Efforts to improve diagnostic capacity in this group must focus not only on diagnostic determination, but also on communicating the diagnosis and efficiently connecting families to resources.

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Cost-effectiveness analysis comparing pre-diagnosis autism spectrum disorder (ASD)-targeted intervention with Ontario's Autism Intervention Program

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New intervention models propose providing autism spectrum disorder (ASD) interventions, such as the Early Start Denver Model (ESDM), before diagnosis. We performed a cost-effectiveness analysis comparing costs and dependency-free life years (DFLYs) generated by comparing both pre-diagnosis intensive ESDM (ESDM-I) and parent-delivered ESDM (ESDM-PD) to the Ontario Status Quo (SQ). The analysis took a time horizon to age 65 using both provincial government and societal perspectives. Estimates of effectiveness came from published literature. The mean expected IQ was estimated for each intervention profile. IQ outcomes were assigned a probability of achieving an Independent (60 DFLYs), Semi-Dependent (30 DFLYs) or Dependent (0 DFLYs) outcome. Costs were determined using the budget of an ESDM pilot project and government publications. A discount rate of 3% was applied to costs and effects occurring more than one year in the future. An incremental cost-effectiveness ratio (ICER) was calculated. One-way and probabilistic sensitivity analyses were performed. From a provincial perspective, the ESDM-PD resulted in a savings of nearly $9,000 per person to age 65 compared to SQ, and generated 0.17 additional DFLYs. The ICER for ESDM-I compared to SQ was $23,000 per DFLY gained, and the ICER for ESDM-I compared to SQ was $58,000 per DFLY gained. One-way sensitivity analyses showed the model was most sensitive to uncertainty in predicting functional outcomes from IQ. From a societal perspective, the ESDM-I was the dominant strategy, producing more DFLYs for a lower cost than ESDM-PD or SQ. The societal model was most sensitive to uncertainty in predicted functional outcomes and caregiver costs. Probabilistic sensitivity analyses for both provincial and societal models showed considerable uncertainty in the effectiveness estimates of the interventions. Pre-diagnosis ASD-targeted intervention may be associated with cost savings compared to current Ontario service models; however, predicted gains in independence based on increased IQ remain low with all programs. Further study on the effectiveness of these models is necessary to decrease uncertainty of the cost-effectiveness estimates.

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Cost-Effectiveness Analysis of Preimplantation Genetic Screening in In Vitro Fertilization

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The objective of this study was to examine the cost-effectiveness, per ongoing pregnancy achieved, of in vitro fertilization (IVF) with and without preimplantation genetic screening (PGS). A decision analytic model was developed to compare IVF alone and IVF with PGS from a societal perspective. The time frame of the study was one IVF cycle, defined as one egg retrieval and any or all subsequent embryo transfers. An ongoing pregnancy was defined as any pregnancy reaching the second trimester of gestation. Outcome probabilities were extracted from the peer-reviewed literature or based on expert opinion. Costs were obtained from Ontario fertility clinics, the Ontario Schedule of Benefits, and expert opinion. One way and probabilistic sensitivity analyses were conducted to examine the robustness of the model. Using base case estimates, the chance of achieving an ongoing pregnancy was 35% with IVF alone and 51% with IVF with PGS. The costs per ongoing pregnancy were $16,916 and $18,512 for IVF alone and IVF with PGS, respectively. The incremental cost-effectiveness ratio was $9,649 per ongoing pregnancy. The one way sensitivity analysis indicated that the model was most sensitive to changes in the probability of achieving an ongoing pregnancy with IVF alone. Probabilistic sensitivity analysis revealed that IVF with PGS was more expensive but more effective than IVF alone in 76% of iterations, but dominant in 23% of iterations. IVF with PGS is more expensive and also more effective than IVF alone in achieving an ongoing pregnancy, with an incremental cost-effectiveness ratio of $9,649. Future research should focus on extending the outcome measure to live birth and utilizing Ontario data to refine the probability inputs.

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Costs of Health Care across Primary Care Models in Ontario

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This study analyzed the relationship between Ontario primary care remuneration models (fee-for-service (FFS), enhanced-FFS, and blended capitation) and primary care and total health care costs. Utilization data for one year was examined using administrative databases at the Institute for Clinical Evaluative Sciences for a 10% random sample selected from the Ontario adult population eligible for public health insurance (n=1,171,019). Primary care and total health care costs were calculated at the individual level including costs from physician services, hospital visits and admissions, long term episodes, drugs, home care, rehabilitation, lab tests, and visits to non-medical health care providers. Analyses used both log-transformed ordinary least squares and generalized linear model regressions. FFS Patients were younger, more likely to be males and of lower income; they also had higher health care costs, which were mainly driven by higher long term episodes and hospital costs. Patients in blended capitation models were healthier and wealthier than those of other primary care models. Primary care and health care costs increased with patients' age, morbidity, lower income quintile and for females. Primary care and total health care costs were significantly different across Ontario primary care models. Using the traditional FFS as the reference, analyses that adjusted for patient factors showed that patients in enhanced-FFS models had the lowest primary care and total health care costs while patients in blended capitation models had higher primary care but lower total health care costs. Incremental costs for primary care in blended capitation models appear to be offset with lower total health system care costs. The differences in patients' characteristics across models (selection bias) suggest that case-mix variables included as risk adjustment in these analyses may not fully capture patients' complexity.

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Costs of Mental Health Care Services among High Cost Users in Ontario

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A small proportion of health care users account for a disproportionately large share of health care costs; these patients are commonly termed high-cost users (HCUs). HCUs for whom the majority of cost is attributable to mental health service use may differ from HCUs with primarily non-mental health related costs. We evaluated HCUs in Ontario, Canada using administrative health care databases for the fiscal year 2012. Mental health HCUs were defined as patients in the 90th percentile of the cost distribution for whom 50% or more of costs were mental health-related; non-mental health HCUs were defined as all other HCUs. Mental health HCUs were compared to non-mental health HCUs on socio-demographic characteristics, health care utilization, and total and average costs. In 2012, there were 38,739 mental health HCUs in Ontario that accounted for a total cost of $1.4 billion to the health care system. The average cost was $36,502 per user compared to $24,066 per non-mental health HCUs (t? p-value < 0.01). Mental health HCUs were generally younger and of lower income than non-mental health HCUs. Now compare them on hospital services, ED and physician services Approximately 78% of mental health HCUs had at least one psychiatric hospitalization and over 90% had at least one physician outpatient visit., but A substantial proportion of mental health HCUs used non-mental health services while few non-mental health HCUs used mental health-related services. Mental health HCUs are younger, incur higher average health care costs and have different health care utilization patterns compared to non-mental health HCUs. This should be considered in policies and interventions designed to address high health care spending.

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Design, Implementation and Evaluation of Complex Health Care Interventions in the Community

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Complex interventions (CIs) are defined as interventions with several interacting components. They are context-dependent and go beyond the PICO model research question. The objective of this abstract is to present our experience with the design, implementation and evaluation of complex health care interventions for chronic disease management in the community. The Wound Interdisciplinary Teams (WIT) study is a community-based two-arm pragmatic randomized controlled trial designed to evaluate the effectiveness and cost effectiveness of a systematic referral process to improve primary care access to multidisciplinary wound care teams (MDWCTs) in Toronto from May 2011 to May 2013. Telehomecare (TLC) study is a multi-level program evaluation of telehomecare provided to community-based patients with heart failure or chronic obstructive pulmonary disease. Telehomecare program was launched in Ontario in 2007, and is currently being implemented across three Local Health Integration Networks (LHINs): Toronto Central, Central West and North East LHINs. During design and implementation of the WIT study we were faced with different challenges/barriers; many of them were context driven and very specific to community setting. Many challenges were associated with multiple stakeholders' involvement (four community clinics, four nursing agencies, two multidisciplinary wound care teams) and different organizational and research culture they bring. Some of these barriers significantly affected conduct of the study and validity of study results. Evaluation of telehome program identified various organizational factors (facilitators and barriers) and processes, which facilitated or impeded the implementation and adoption of telehomecare across three LHINs. We were able to identify which of the critical success factors have been implemented in which LHINs to date and what implementation strategies appear to be the most responsible for success. There is an increasing role for complex health care interventions in the community setting. However their design, implementation and evaluation might be very challenging. Early engagement of all stakeholders to understand the role of context and implementation processes is essential for successful design and implementation of complex interventions.

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Development and Validation of a Decision Aid for Choosing Among Anticoagulants for Atrial Fibrillation

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The objective of this study was to validate a decision aid to assist patients in choosing between four different oral anticoagulants (warfarin vs. dabigatran vs. rivaroxaban vs. apixaban) for atrial fibrillation (AF). The validation assessed decisional conflict, knowledge transfer, and overall clarity, comprehensiveness and helpfulness in making evidence-informed decisions. The study design was a prospective case series assessing face validity and construct validity. Participants (age ≥ 60 yr) were recruited from thrombosis and cardiology clinics. The decision aid described AF, stroke, bleeds, anticoagulation versus nothing or aspirin, then compared the four anticoagulants on important clinical, lifestyle and cost outcomes. The primary outcome was confidence in making decisions regarding their treatment, using a validated decisional conflict scale. The secondary outcomes included: change in knowledge scores and ratings of clarity, helpfulness and comprehensiveness. 81 patients (mean age 73.8 [SD 8.5], 34.6% female, 77.8% taking anticoagulant) participated. After using the decision aid, the mean decisional conflict score was low at 6.5 (SD 10.6) on a scale from 1-100. The mean knowledge score was 7.4 (SD 1.7) out of a total score of 10 and improved to 9.3 (SD 1.0) following use of the decision aid ($p<0.001$). The mean helpfulness score of the decision aid in making a treatment choice was high at 6.15 on a scale from 1 to 7. Only one participant (1.2%) found presented information in the decision aid difficult to understand. Information on AF, stroke, bleeding, benefits, harms and the summary drug comparison table was rated as good or excellent in terms of clarity and comprehensiveness. Our Anticoagulant Decision Aid helps patients participate in shared decisions about anticoagulation, which is the highest priority medication safety topic in Canada. Future research is required to evaluate how the decision aid influences actual anticoagulant choice and clinical outcomes.

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Different Patterns of Advanced Access Implemented in Primary Healthcare Practice

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Several international surveys show that timely access to primary healthcare is an important problem in Canada. One solution for improving timely access is the implementation of advanced access in primary health care settings. The objective of this presentation is to show different patterns of advanced access implemented in medical practices. The Ministry and Health of Social Services of Quebec and the Quebec Federation of General Practitioners (FMOQ) developed a 3-day training session for family physicians willing to implement advanced access in their practice. We invited family physicians from the two first cohorts of this training session (2011 and 2012) to participate in our study. We conducted 20 interviews with family physicians. All interviews were coded by two independent researchers with QDA Miner. Analysis was based on several codes such as collaboration with nurses, the secretary's role, scheduling strategies, caseload and the perceived effects of advanced access on practice and patient satisfaction. Three distinctive patterns of advanced access were observed. The most popular pattern is "standard advanced access" was implemented by 13 of the family physicians interviewed. Its main characteristics are: 1) the extended role of nurses managing follow-ups for patients with chronic disease and 2) appointment schedules open two weeks in advance. The second pattern, "hybrid advanced access", was implemented by five family physicians and is characterized by: 1) nurses having more traditional family physician's assistant roles, 2) the presence of a recall list or maintaining annual visits, and 3) multi-site practices. A third pattern of "very light advanced access", implemented by two physicians, is based on 1) willingness to offer timely access, but working solo, without strong collaboration with nurses, without synergy with the secretary in adopting new scheduling strategies, 2) working longer hours than before to meet the exceeding demand and 3) a caseload of vulnerable patients. Advanced access requires time to be fully implemented and calls for important changes in practice that should be planned. All family physicians interviewed, except one, were very satisfied with the implementation of advanced access in their practice, would not go back and perceive benefits for themselves, their team and their patients.

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Do British Columbians with major depression receive minimally adequate care?

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The objectives of this study are to determine the degree to which patients diagnosed with major depression received minimally adequate counseling or psychotherapy (>4 sessions/year), minimally adequate antidepressant therapy (at least 84 days/year), and either treatment modality; and, to measure physician- and patient-level variations in the receipt of depression care. We used linked health administrative data from BC to identify, retrospectively, individuals who received inpatient or outpatient diagnoses of major depression (MD) in FY 2010-11. We excluded those who had a 12-month history of mood disorders and those treated for bipolar I and schizophrenic disorders during a 12-month period before and after the index date of MD diagnosis. The use of publicly-funded MD-related health services (i.e. physician visits and prescription fills) were tracked for 12 months. The influence of patient-level characteristics and physicians-level variations on the receipt of minimally adequate health services where assessed using mixed-effects logistic regression analyses. We identified 110,529 individuals, predominantly women (65%) and urban residents (89%), who met study criteria. Of the total, 13% received minimally adequate counseling/psychotherapy with higher proportions observed among men, younger individuals, and urban residents. In contrast, there were more who received minimally adequate antidepressant therapy (48%), with women, older individuals and rural residents having the highest proportions. Overall, around 53% received either forms of treatment and the pattern of use is similar to that of antidepressant therapy. After adjustments for other factors in a multivariable model, these factors remain independent predictors of the receipt of minimally adequate depression care. Further, results indicate the presence of potentially important differences in the receipt of depression care that are attributable to variations among physicians, especially with respect to counseling or psychotherapy. Only about half of British Columbians diagnosed with major depression receive either minimally adequate counseling/psychotherapy or minimally adequate antidepressant therapy. Disparities also persist, affecting mostly men and younger individuals. Policies aimed at improving access to and reducing physician variations in the provision of depression care are therefore needed.

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Do economic fluctuations affect the health behaviours of Canadians?

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Our objective is to provide Canadian estimates for the association of modifiable health behaviours, self-assessed mental and general health, with economic fluctuations. More specifically, we look at variation in unemployment rates at the Census Metropolitan Area (CMA) level to understand how local labour market changes affect the above variables. All cycles/years of the CCHS (cycle 1.1 to 2013) are pooled to construct a panel data set. We include only variables consistently available. A model with location (CMA) and time (month and year) fixed effects, clustered at the CMA level, is estimated. This model differences out time invariant unobserved heterogeneity over the period studied and provides unbiased coefficient estimates. For example, some geographic areas may experience both poor health and high unemployment but a causal relationship does not exist. If individuals within CMAs have similar unobservable characteristics errors may be correlated - clustering addresses this to provide robust standard errors. Health behaviours are measured using dichotomous variables for smoking, alcohol use, physical activity and consumption of fruits and vegetables. Some of the results are as follows. Smoking increases during economic downturns while alcohol use (measured by heavy drinking and binge drinking) decreases. Physical activity also decreases. Daily consumption of fruits and vegetables increases for those who consume less than 5 servings per day but decreases for those who consume more than 5 servings per day – some individuals take on positive health behaviours. Individuals that report being in poor and fair health increase while those that report good and very good health decrease. Life and work stress increase during economic downturns in addition to those reporting poor and fair mental health. Health systems can help to change health behaviours and improve health. Programs and services delivered by health professionals that help individuals improve health behaviours can facilitate prevention rather than treating conditions or illnesses. Understanding Canadian health behaviours during economic fluctuations can inform policymakers when making decisions for improving population health, especially in times of fiscal restraint.

Effects of Family Medicine Groups on visits to the emergency department among diabetics in Quebec between 2000 and 2011: a population-based segmented regression analysis of an interrupted time series

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Family Medicine Groups (FMG) were introduced in Quebec in 2002 to re-organize primary care practices and encourage team-based and inter-professional approaches to service delivery. We measured visits to the emergency department (ED) as a proxy for access to and quality of primary care, before and after the reform using an open cohort of individuals diagnosed with Type 1 and Type 2 diabetes. Administrative databases were used to derive the weekly rate of ED visits for acute diabetes complications between April 1, 2000 and March 31, 2012. We performed an interrupted segmented regression analysis to derive the estimated and extrapolated rates of visits in the years following the introduction of the reform. We employed an outcome control series of diabetics visiting the ED to treat appendicitis to strengthen the study's internal validity. After 9 years of reform implementation, we observed a reduction of 2.12 and 2.25 visits to the ED per 10,000 diabetics per week to treat acute diabetes complications in urban and rural areas, respectively. This accounts for approximately a 36% and 34% decrease in the weekly rate of visits in urban and rural regions, respectively. No change in the rate of visits to the ED for appendicitis was observed by the end of the study period. Our results suggest that the decreases in the rate of ED visits are attributed to the implementation of the FMG model across the province. The reform may have a cumulative effect over time owing to greater patient and physician familiarity with the model and the growing number of FMG practices established over time. Evidence of these decreases despite the low-intensity nature of the FMG reform suggests the potential for this model to act as a future platform for implementing comprehensive care models for chronic disease management.

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Effects of Housing First on employment and income of homeless individuals: results of a randomized trial

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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 March2011, 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). 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 competitive 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 0.69 (p=0.016, 95%CI 0.51-0.93) and 0.77 (p=0.070, 95%CI 0.58-1.02) for moderate needs. Odds ratios are adjusted for age, gender, location, and housing stability. Statistically significant differences were observed between cities. HF had no impact on types of income. The trends observed in this study suggest that HF alone does not increase the probability of obtaining competitive employment. Additional services may be required to help people achieve their goals of employment. Further research is needed to determine why people receiving HF have reduced odds of finding employment.

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Engaging older adults in healthcare research and planning: Guidelines from the CHOICE project

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Engaging the community in healthcare research and planning has been recognized as an important component of system improvement. The involvement of older adults is particularly critical, given that they are high users of the healthcare system. Best practice guidelines for engaging older adults and their families will be presented. In the CHOICE project, we conducted a realist synthesis (Greenhalgh et al., 2001; Pawson et al., 2005) of available knowledge on strategies for engaging older adults and their families (including other informal caregivers) in healthcare. The search methodology was informed by a framework for realist review (Wong et al., 2013). Our synthesis encompassed theoretical frameworks and peer-reviewed and grey literature. Expert consultation included interviews with academics (n=2), two focus group interviews with seniors and families, and two half-day workshops organized with our partner Patients Canada. The initial search generated over 15,000 articles; of these, 546 were identified as relevant to healthcare research and planning and were retained for further review. A framework for engagement has emerged from this project. Theoretical and empirical work identifies a number of best practice guidelines and associated strategies for engagement of older adults and their families in healthcare research and planning. We have developed best practice guidelines and strategies for engaging older adults and their families in healthcare research and planning. We plan to implement and evaluate the guidelines and strategies from the CHOICE project, in collaboration with members of our SHARP (Seniors Helping as Research Partners) network.

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Episodic Caregiving - The Caregiving Sister That Policy Forgot

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The Episodic Caregiver Support Initiative was launched in the fall of 2013 to explore the needs of family/friend caregivers of individuals with episodic disability in Ontario. The objective was to answer the question: What is the ideal model of support for family/friend caregivers of persons living with episodic disabilities? Research involved a literature review, a survey of caregivers and persons with episodic disabilities, an environmental scan & an accompanying commentary to the scan, as well as in-person focus groups in order to get a deeper understanding of the challenges that are unique to this subset of family/friend caregivers. Through the research and the stories shared, we learned that there was much that the broader social systems and we as a society could do in order to better demonstrate the value we intrinsically place on caregiving. The results fell within the following categories: - Unique aspects of caregiving in an episodic disability context - Impact of episodic disability on different care relationships - Access to supports - The ideal system Drawing on the lessons learned from this project a model was developed to depict how caregivers need to be supported to address the life domains most impacted by their caregiving of a person living with episodic disability: education/information; job security and flexibility; income adequacy and security; health services; emotional wellness; and social supports. The onset of episodic disabilities in young adulthood or midlife and the long-term, unpredictable and fluctuating nature of these illnesses yields challenges for caregivers that are both similar and different to those experienced by those who care for a person with a long-term disability or aging-related conditions.

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Examining the influence of organisational and institutional arrangements on priority-setting for health technology assessment (HTA): A mixed methods study

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Priority-setting for health technology assessment continues to be a challenge. Currently, evidence on how technologies are prioritized for assessment and whether current processes are effective is limited. This study seeks to understand how HTA organisations approach priority-setting and how institutional and organisational contexts within which HTA organisations operate influence priority-setting. A mixed methods design encompassing a descriptive survey and qualitative comparative case study is used. The descriptive survey analyzes the range of ways in which HTA organisations address priority-setting and the specific processes that are used. The qualitative comparative case study assesses how differences in the institutional and organisational contexts within which HTA organisations operate influence how technologies are prioritised for assessment. Adopting a critical social science perspective, and specifically institutional theories of organisation and organisational decision-making, this research aims to understand how the institutional and organisational norms, interests, and structures within which HTA organisations function affects priority-setting processes. Increasing attention has been placed on the development of rational and explicit priority-setting processes and tools to support decisions regarding which technologies should be prioritized for HTA. Yet evidence suggests that the way in which HTA agencies set priorities for assessment varies across different countries. This study suggests that approaches to priority-setting for HTA may be influenced by three contextual levels in which priorities are being set. The contextual levels include the jurisdictional and institutional location of the HTA agency, its organisational context, and internal decision-making context of the HTA agency. This study suggests that despite the emphasis on the development of rational approaches to setting priorities for HTA, a focus on decision-making methods cannot override the political and institutional dynamics of priority-setting. This study aims to understand problems of applying rational approaches to priority-setting and utility of such approaches. In efforts to improve priority-setting processes in HTA, this study will help decision-makers identify where resources are efficiently allocated through understanding what does and doesn't work for priority setting in HTA.

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Family physicians' interactions with sales representatives: a focus group study in three countries

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To examine and compare the experiences of family physicians in Canada, the United States, and France in their interactions with pharmaceutical sales representatives, in particular physician attitudes about the quality of safety information provided by sales representatives and the influence on prescribing practice. Fifty-seven family physicians in four research sites (Vancouver, Montreal, Sacramento, and Toulouse) participated in 12 focus groups; all had participated in a prior observational study of the quality of safety information provided by pharmaceutical sales representatives in three different regulatory environments. The focus groups provided an opportunity to further explore physicians' experiences of these interactions and responses to key study findings. The latter indicated a serious problem with information quality and balance. A thematic analysis was conducted following the five-stage framework analysis approach: 1) familiarization, 2) identifying a thematic framework, 3) indexing, 4) charting, and 5) mapping and interpretation. Physicians participating in the focus groups are seeking accessible, evidence-based information on medicines to inform their prescribing practices. One of the main sources of drug information used by physicians is sales representatives. Physicians report a high level of awareness that interactions are biased and promotional. Their expectations of receiving balanced information about drug benefits and harms from sales representatives are low, and most do not acknowledge an influence on prescribing. The physicians who participated in the focus groups see sales representatives regularly and value the information, drug samples, food and invitations provided. Attitudes toward the interaction, and toward the inadequate provision of information on harm were often contradictory. The French physicians raised safety concerns more often than those in Canada or the U.S. Given the high level of cognitive dissonance among physicians, reliance on information provided by pharmaceutical sales representatives is likely to continue, despite information biases, unless regulations limit these interactions. Physician experiences and preferences identified in this study may inform the development of interventions to address the immediate lack of safety information.

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Gender differences in primary care clinical activity and uptake of incentive payments in British Columbia: A preliminary analysis

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The objective of this study is to examine the extent to which observed differences in physician income and activity between male and female primary care physicians are driven by differential uptake of a) non-clinical payments, including bonuses, incentives, on-call payments and others; and b) alternative-payment programs (APP). We used population-based administrative data from PopDataBC: patient and physician registries, physician billing records (for all fee-for-service (FFS) encounters) and APP (non fee-for-service) payments for all BC physicians for 2005-12. We modeled percent of compensation for non-clinical activities, and percent of compensation from APP and FFS sources using generalized linear models for each study year. Results are presented as annual least-squares mean percent for male and female physicians. Average physician compensation remained constant during the study period. Payments for non-clinical activity increased significantly (from \$19,935 to \$35,980) while payments for clinical care declined (from \$200,723 to \$184,374). The proportion of physicians' income derived from non-clinical and APP sources increased significantly over the study period. Male physicians had significantly higher income for all study years. From 2007/8 forward, significantly more of male physicians' income came from non-clinical activities compared with females. Non-clinical activities accounted for 11% of the income gap between male and female physicians in 2005/6; this increased to 22% in 2011/12. Female physicians, received a significantly larger proportion of their income from APP sources for the duration of the study period, offsetting the observed gender gap in FFS billings. Differential uptake of non-clinical payments and APP remuneration schemes appear to be significant drivers of the income/activity difference between male and female physicians. The increasing proportion of physician payments for non-clinical activities and the reduction in clinical care billings raises concerns about maintaining adequate primary care service supply in future.

Healthcare Associated Infections, Infection Prevention & Control: Patient Safety Survey

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The objective of this survey was to identify factors that may influence IPC best practices and outcomes, within the context of patient safety. Results are intended to help inform future action plans related to advancing IPC in Canada, and healthcare associated infection (HAI) related events. The HAI-IPC patient safety survey was sent in August, 2014 to a range of organizations, healthcare providers, professional associations, and stakeholder groups in Canada to seek input from those involved in IPC, healthcare delivery, patient safety, and quality care issues related to HAIs. Participants were given 2 weeks to respond(n=153), and over two thirds of respondents indicated primary work in an acute care or other healthcare setting, while stakeholder organizations represented 20% of the total sample. As the context of where participants worked influenced survey questions, results were separately analyzed and compared. There were 13 questions common to both groups. Results revealed the most commonly identified IPC campaigns employed in the workplace were the 'Stop! Clean Your Hands day', 'Safer Healthcare Now!', 'Just Clean Your Hands' and 'Do Bugs Need Drugs' initiatives. Among respondents that answered yes to AMR involvement, a common theme that emerged was the need for established antimicrobial stewardship programs, suggesting a commonly held priority in tackling this emerging issue. Despite this, antimicrobial prescribing practices were identified as the top reported concern by one-third of HCWs (32%), but only 13% of stakeholder groups. Burden of disease was a common concern between HCW and stakeholder groups. Top items identified to support IPC best practices were similar among HCWs and stakeholders. These included staff training/education as well as managerial support and organizational priority. Although many commonalities were observed, the apparent differences may present challenges during the development and implementation of a national patient safety action plan in relation to IPC policy. This is particularly significant given both HCWs and stakeholder survey participants highlighted the need for national coordination of standards in maximizing IPC.

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"How appropriate is all this data sharing anyway?": Building consensus on electronic health information exchange in extended circles of care

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A CIHR planning grant facilitated a stakeholder-centered planning meeting to identify research gaps in our understanding of the impact of electronic health information exchange (eHIE) in integrated, community-based, multi-disciplinary care teams. We identify research directions, objectives and preliminary questions to study the integration of health records in an integrated healthcare system. Using a nominal group technique, 30 key experts and stakeholders from across Canada explored these gaps in a daylong meeting. Participants included primary care providers (family physician, nurse practitioner, pharmacist), social supports (social worker, mental health nurse), patient representatives (advocate, patient), health region managers, technology experts and health organizations (eHealth Ontario, Canada Health Infoway, Canadian Mental Health Association), and experts in law, privacy and ethics. Following sensitizing presentations from researchers, participants considered the question: "What research needs to be done to better understand how electronic health records should be shared across large healthcare teams that include social supports? In two rounds of consensus building, participants ranked the importance of each idea on a 9-point Likert Scale, the rankings were aggregated, and concepts that achieved a mean score of at least 6 by at least 70% of the group were retained. Fifty-eight discrete questions that address gaps in understanding were identified by the group. Eight items achieved consensus and addressed questions related to the impact of information sharing on care team outcomes, assurance of data quality and accuracy, cost-benefits, which processes will use the data, regulatory or legislative changes, appropriateness of sharing core datasets, defining the circle of care, and the role of data analytics. Healthcare reforms are increasingly focused on systems that integrate and coordinate multidisciplinary care, facilitated by eHIE. The goal is to ensure providers have reliable clinical information; implicit is the assumption that providers have a shared understanding of that data. Research prioritization will ensure common concerns and barriers are addressed and resolved.

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Impact of dementia on diabetes care quality in Ontario

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Comorbid dementia presents considerable challenges for diabetes management. This study aims to examine differences in the quality of diabetes care (frequency of glycated hemoglobin and LDL-cholesterol testing, and dilated eye exam) and the prevalence of diabetes-related long-term and short-term complications in people with diabetes with and without comorbid dementia. This population-based retrospective cohort study identified all Ontarians aged 18 years and older with physician-confirmed diagnosis of diabetes with and without dementia using clinical administrative databases, in the period from 2007 to 2009. Established algorithms were used to determine whether patients received at least four glycated hemoglobin (HbA1C) tests, two LDL- cholesterol tests, and one dilated eye examination within two years. The diabetes-related short-term complications were defined as hyperglycemia with coma or acidosis, and severe hypoglycemia. The diabetes long-term complications were defined as microvascular complications, including diabetic retinopathy, nephropathy, neuropathy, and macrovascular complications, including diabetes-related circulatory complications, and peripheral angiopathy. 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. The cohort included 37,739 (4.4%) diabetes patients with comorbid dementia. Overall, quality of diabetes care in Ontario was low during 2007-2009. Compared to diabetes patients without comorbid dementia, individuals with comorbid dementia were significantly less likely to receive recommended HbA1C tests (OR= 0.90; 95% CI 0.83-0.93); LDL-cholesterol tests (OR= 0.85; 95% CI 0.84-0.86); and dilated eye examination (OR= 0.84; 95% CI 0.81- 0.86). Diabetes patients with comorbid dementia were significantly more likely to have diabetes-related short-term and long-term complications, compared to those without dementia (OR= 1.16; 95% CI 1.11-1.21 and OR= 1.36; 95% CI 1.17-1.58, respectively). This study results identified dementia as a barrier to the receipt of the minimal level of annual recommended diabetes monitoring tests. Future research is needed to identify to what extent a mismatch of current clinical guidelines with patient-centered care contributes to poor diabetes monitoring in diabetes patients with comorbid dementia.

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Knowledge and effects of the WHO Global Code of Practice on the International Recruitment of Health Personnel on health worker migration

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Our presentation analyzes the state of knowledge of source country informants and international policy actors on the WHO Global Code of Practice on the International Recruitment of Health Personnel (Code) and its effects on health worker migration. Our findings are applied to the context of international instruments and bilateral agreements. Our CIHR-funded study "'Source' Country Perspectives on the Migration of Highly Trained Health Personnel" studied the causes, consequences and policy responses to the migration of health workers from the Philippines, South Africa, Jamaica and India, including questions regarding the WHO Code. In addition to scoping reviews of the literature and policy documents, the international and country-based teams conducted interviews with key informants; surveys of targeted professions; consultations with key international agencies; a multi-country workshop to share findings and lessons learned; and within-country policy dialogues. Our findings were analyzed in-country to provide local perspectives, and collectively reviewed and discussed by team members. The migration of highly trained health personnel from source to destination countries can contribute to shortages of workers in source countries, sometimes to devastating effect on health and health equity. Although the Code is intended to assist in protecting the integrity of a state's health systems with respect to health workers, to protect health workers themselves and provide recruitment guidance to public and private sector employers, knowledge of the WHO Code was minimal for source country informants. Any direct effects of the Code on the migration of HHR were difficult to assess. Interviews with international policy actors unsurprisingly showed awareness of the Code, but stressed a need for better shared responsibility and international cooperation on migration policy and development, including bilateral and trade agreements. While the Code has raised awareness of the problems of migration and staff shortages in source countries, knowledge of the Code is variable across levels of governance. As policy, its impacts on health worker migration are difficult to assess and it may need enhancing to contribute towards building sustainable health systems.

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Laying the foundations for multi-jurisdictional research: Structural and population features of Western Canada's urban health regions and zones

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How can we begin to compare health system performance among health regions that differ in so many ways? How do we know whether observed performance differences are merely a function of population differences? How do regions differ in their structures, services, and policy environments? In preparation for a planned investigation of the factors underlying regional variation in patient flow performance, we undertook a high-level scan of the most salient differences among the urban health regions/zones of Western Canada. Publicly available data (CIHI, Statistics Canada, regional and provincial websites, etc.), were supplemented by internal documents and key informants. Some data required cross-checking or adjustment to ensure inter-regional comparability. Variables included population features (e.g., urban concentration, demographics, health status, social determinants of health), service landscape (acute care and long-term care facilities and beds, provincial home care policies, etc.), health human resources, and regional structure and history. The prevalence of certain risk factors for heavy service utilization is higher in some regions/zones. The supply of hospital and long-term care beds, physicians and nurses, and home care also varies, although not necessarily in the ways one would predict from population characteristics. Other than urban concentration, there are no obvious axes on which to create subgroups, nor do the available indicators separate neatly into distinct dimensions. The scan also highlighted the diversity and complexity of organizational structures in the participating regions, underscoring the need for the ensuing research to probe system design. While the findings suggest that there will be no simple explanations for performance variation, they provide important scaffolding for more extensive data collection that will yield deeper understanding. Given that regions differ in so many known and unknown ways, comparing the particulars of flow-improvement strategies or service offerings would likely generate more questions than answers. However, asking higher-level questions about system design, decision-making processes and organizational context should uncover deeper patterns that are meaningful across regions.

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Obesity Predicts Differential Rates of Coronary Revascularization Following Cardiac Catheterization

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Persons with obesity have been identified as marginalized populations with restricted access to health care services. We investigated whether patients with obesity are more or less likely to undergo coronary revascularization compared to patients with a body mass index (BMI) classified as normal. We used detailed clinical data collected as part of an inception cohort of patients from Alberta who underwent cardiac catheterization between April 2003 and March 2014. Rates of receiving percutaneous coronary intervention (PCI) or coronary artery bypass graft (CABG) surgery after index cardiac catheterization were examined using multivariable Cox regression, comparing patients in overweight and obese BMI groupings to patients with normal BMI, and adjusting for available clinical covariates. Revascularization rates were separately examined for patients with higher-risk (3-vessel, 2-vessel with left anterior descending, or left main artery) and lower-risk (1-vessel or other 2-vessel disease) coronary disease. Of 73,071 patients who had BMI data recorded, 23% were of normal weight, 40% were overweight, and 37% were obese. Although patients classified as overweight and obese were more likely to have PCI (adjusted hazard ratio (HR) 1.04, 95% confidence interval (CI), 1.01-1.08 and HR: 1.06, 95% CI, 1.02-1.09, respectively), CABG surgery rates overall were similar for patients with BMI classifications of normal and obese (adjusted HR: 1.01, 95% CI, 0.96-1.05). However, patients with severe obesity (Class III, BMI >40) were more likely to have CABG surgery if they had higher-risk coronary disease (adjusted HR: 1.27, 95% CI, 1.02-1.57), but less likely if they had lower-risk coronary disease (adjusted HR: 0.68, 95% CI, 0.58-0.78), compared to patients with a BMI classified as normal. The pattern of use of revascularization procedures after cardiac catheterization differs across BMI subgroups. These differences might be clinically appropriate, but they warrant further exploration. Subsequent clinical outcomes, related health care utilization and complications should also be compared.

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Planning for Change In Health Care Reform: The Case of Alberta

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To identify the necessary elements of transition planning in reorganization of health services that accompanies large-scale health care reform. This research is based on 60 in-depth interviews of leadership and management personnel in Alberta in 2013. Interviews focused on management challenges encountered at all levels within the jurisdiction of Alberta Health Services. Interview text was analyzed using grounded research techniques. Elements of what should be part of an effective transition plan were identified based on the experience of personnel who had been present during multiple reorganizations. Interviews of management personnel suggest several key challenges associated with incomplete transition planning. These include uncertainty of scope of work, reporting relationships, and career paths. Required components of transition planning were inferred, including: o Obtaining buy-in from critical personnel; o Ensuring that all critical functions will be adequately staffed following transition; o Maintaining "organizational memory" through documents and records; o Taking steps to retain key personnel. Public health care delivery authorities must be responsive to elected officials, newly emergent issues in health services, and changing models of effective service delivery. But organizational change cannot take place merely by government mandate. It must be accompanied by comprehensive transition planning.

Potentially Avoidable Emergency Department Visits Made by Nursing Home Residents: Refining Current Definitions

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The prevalence of potentially avoidable emergency department (ED) visits made by nursing home (NH) residents ranges from 3.8-67.0% due to varied definitions. This study compares the prevalence of these potentially avoidable ED visits using past and new definitions. This cohort study includes all NH residents in the Winnipeg Health Region of Manitoba, Canada with 1+ ED visit during 2012/2013. Person-level administrative health care records were used to create various existing and new definitions of potentially avoidable ED visits. Existing definitions include visits where residents were: a) triaged as less or non-urgent using the Canadian Triage and Acuity Scale; or b) discharged back to the NH following the visit. Using linked records, we identified ED visits where residents were triaged as less/non urgent, had no diagnostic imaging or blood work performed, and were subsequently discharged back to the NH. From our cohort (N=12,403), 25.0% of residents (N=3,159 people) made 5,991 ED visits during the year, meaning that amongst ED users, 45.0% had multiple visits. 38% of all visits resulted in resident death or admission to the hospital. From existing definitions, counts of potentially avoidable ED visits varied greatly, ranging from 2,918 (48.7% of all visits; residents returned to NH regardless of CTAS) to 1,063 visits (17.7% of total; residents were triaged as less/non urgent, then returned to NH). During these latter visits however, residents often had diagnostic imaging or blood work performed (N=619 visits), implying that only 7.4% of all ED visits (N=444) were potentially avoidable. These visits were made by 352 residents who most often arrived to them by ambulance. The prevalence of potentially avoidable ED visits made by NH residents may be lower than previously reported, highlighting the need for standard definitions. Reducing these visits has resident quality of care and healthcare system cost saving benefits.

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Provider perspectives on facilitators and barriers to accessible service provision for immigrant women with postpartum depression (PPD)

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What do health services providers who work with immigrant women in Canada identify as: 1. facilitators and barriers for immigrant women in accessing primary health care services for PPD 2. individual, organizational, and system level challenges they face in terms of providing accessible services for immigrant women with PPD? The study used a qualitative interpretive descriptive design, shaped by an integrated knowledge user-researcher partnership. Knowledge users were engaged throughout the research cycle, helping identify research questions, establishing and refining recruitment and data collection approaches, and contextualizing recommendations. Fourteen community and health services providers who work with immigrant women living in Scarborough, ON, participated in individual in-depth, face-to-face interviews. Using a socio-ecological framework as an organizing structure, an inductive approach to thematic content analysis was conducted. Providers identified attributes that foster relationship building, including addressing power dynamics, understanding women's experiences, enacting cultural competence, involving family members, providing adequate time, and facilitating system navigation. Together, these approaches helped break down barriers and facilitated service accessibility. Relationship characteristics such as trust and establishing therapeutic alliances were thought to positively impact PPD and promote accessibility. Organizational barriers to providing accessible services included assessment approaches, treatment availability/accessibility, wait times, and primary care provider gate keeping. The ability of providers and organizations to address social health determinants also contributed to accessibility. Providers suggested that different organizational and management approaches could facilitate or discourage service coordination across organizations. Finally, providers believed that health and immigration system mechanisms could work more effectively to optimally support immigrant families. Health service providers are critical in supporting immigrant women with PPD and facilitating service accessibility. Organizational and system barriers restrict optimal service provision. Furthermore, gaps exist in terms of available and accessible, decentralized and specialized mental health services. Enhanced system integration and establishment of community-based system navigators could facilitate accessibility.

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Scaling up iKT? Adapting integrated KT strategies to a large multi-jurisdictional network

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Integrated knowledge translation (iKT) demands time-intensive, highly personalized activities to build close relationships with specific stakeholders and meet their unique knowledge needs. Yet there is an increasing demand and need for multi-jurisdictional research. Can iKT be adapted to the new reality of large, multi-organizational networks? An experienced "embedded" researcher (8 years with an RHA's research unit) led the development of a researcher/decision-maker team to investigate how health regions can achieve maximal improvement in patient flow. The team included key stakeholders from the 4 provinces and 8 urban health regions of Western Canada, existing networks (Western Healthcare CEO Forum, Western Patient Flow Collaborative) and Accreditation Canada. Research program development entailed an intensive one-year process informed by iKT principles. This presentation focuses on challenges, strategies and adaptations from the researcher perspective, based on the PI's reflective practice journal, process documentation, and feedback from other team members. The skills of embedded iKT – helping decision-makers identify priority questions, maintaining two-way communication through face-to-face and other channels, communicating in ways that resonate with decision-makers, genuinely listening to and incorporating feedback – are highly transferable. The context of embedded iKT – deep familiarity with a particular organization, longstanding trusting relationships, protected resources and established executive support – is not. Geographic scope and distance multiply administrative and social complexity, and with them the potential for errors. The number and diversity of stakeholder groups makes it harder to establish common priorities and adapt to changing circumstances. The need for external funding introduces research agency deadlines and demands, with some paradoxical adverse impacts on iKT. In short, the aims of scale, depth, and speed are not easily reconciled. Having established the fundamentals of our research program, we will now facilitate local customization, leveraging regional/provincial strengths and interests to reinforce bilateral connections within the overall network. Thus, Year 1 was about adapting iKT to fit a multi-jurisdictional approach; Year 2 will be about adapting that approach to fit iKT.

Structure and Function of Stroke Units in Ontario in 2013-2014

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Stroke Units (SUs) are specialized, geographically defined hospital units dedicated to the management of stroke patients. Previous studies demonstrated that SUs are associated with lower morbidity and mortality. As Canadian SUs differ between each province, our objective was to examine current availability and identify the main characteristics of Ontario SUs. A 2011 list of Ontario SUs, followed by snowball sampling technique was used to ensure all SUs were identified. The Ontario Stroke Unit (OSUN) survey was designed to collect data on important SU components, and was conducted over the phone with SU managers in 2013-2014. An interviewer administered questionnaire contained closed and semi-open ended questions regarding important components of SUs (structure and organization, processes of care, discharge and follow-up planning) as specified by the Canadian Best Practice Recommendations for Stroke Care. Descriptive statistics were used to summarize survey responses. Overall 32 SUs were identified and interviewed: 21 Acute SUs (ASUs), 10 Integrated SUs (ISUs) and 1 Rehabilitation SU. Only 5 are dedicated SUs with its physical location not associated with a specific specialty or sub-specialty ward. One third of the SUs had no dedicated beds reported for stroke patients, but had priority beds. Although acute length of stay (LOS) did not vary with SU type (8-9 days), full LOS was significantly longer for ISUs (28 days) due to rehabilitation services provided. Most SUs reported allied health staff availability, but only half had them as dedicated personnel. Only about 40% of SUs had advance practice nurses on their team. Also, only two thirds of ISUs reported their nursing staff received specialized training in stroke care. This study revealed important areas for improvement in the quality of stroke care in the province: necessity in increased staffing of nurses and specialized stroke care training for nursing staff. Ontario SUs have implemented standard components of stroke care to varying degrees. Greater standardization of necessary SU components is required.

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The CHOICE Project: Engaging Older Adults in Healthcare Decision-Making

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Engagement in shared healthcare decision-making has been recognized as an important, and often lacking, aspect of person-centred care. We aimed to draw on available theory, evidence and experience to develop best practice guidelines for engaging older adults and their families in decisions around their own health care. We conducted a realist synthesis (Greenhalgh et al., 2001; Pawson et al., 2005) of available knowledge on strategies for engagement of older patients and their caregivers in health care decision-making. The search methodology was informed by a framework for realist syntheses (Wong et al., 2013) as well as Arksey and O'Malley's (2005) design considerations for scoping reviews. Our synthesis encompassed theoretical frameworks and both peer-reviewed and grey literature. Search terms included: health care, decision making, public, health care decision making, engagement, and public engagement. Expert consultation included interviews with academics (n=3), two focus group interviews with seniors and families, and two half-day workshops organized with our partner Patients Canada. The initial search generated over 15,000 articles; of these, 2921 were pertinent to health care decision making and were retained for further review. Theoretical and empirical work identifies a range of strategies and levels of engagement of older patients and their families in healthcare decision-making. Many key themes emerged including, the importance of relationships and communication, discussing patient goals and preferences, considering patient and provider characteristics, and understanding the context in which care is being provided. It is also important to discuss and acknowledge the extent to which patients want to participate in healthcare decision-making. We have developed best practice guidelines for creating productive partnerships between older adults, their families, and health care providers. These partnerships can result in more informed clinical decisions, and more effective health care.

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The impact of Quebec primary healthcare (PHC) reform on patients' experience of care, unmet needs and use of services

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To compare Family Medicine Groups (FMGs) and Network Clinics (NCs) implemented since 2003 with the other PHC organizations, regarding changes in patients' experience of care, unmet needs and use of services between 2003 and 2010 in the two most populous Quebec regions (Montréal and Montérégie). We conducted population and organization surveys in 2005 and 2010 in the two regions. Patients' experience of care and use of services referred to the two years preceding the surveys. Organizational and population data were linked through identification of the usual source of care by respondents to the population questionnaire. Design was a before-and-after natural experiment with experimental group (FMGs, NCs, FMGs-NCs) and control group (the other clinics). Differences in changes over time between the two groups were assessed, using difference-in-difference (DID) statistical procedures. Comparability between the two groups on all other variables was obtained by adjusting with propensity scores. Accessibility decreased among users of services between 2003 and 2010, but to a lesser degree for individuals having FMG, NC, FMG-NC as their usual source of care than for those in other clinics (DID = +0.17, p = 0.04). Continuity generally improved among users of services, but the increase was less important for individuals in the FMG, NC and FMG-NC than those in the other group (DID = -0.11, p = 0.10). Responsiveness also increased during the period and to a greater extent in the FMG, NC, FMG-NC group than in the other group. No significant difference between the two groups was found regarding use of services and unmet needs. Sensitivity analyses, done by region and by specific type of PHC organizations, showed additional differences. The PHC reform in Quebec has brought about positive results regarding accessibility of care and responsiveness. Conversely, results on continuity, use of services, and unmet needs did not generally come out as expected. A longer period of time is needed to assess more realistically the impact of the PHC reform.+

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The intersection of gambling and substance use among men facing homelessness

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The impact of problem-gambling on the homeless population is receiving increasing attention as the links between gambling, substance use, and perpetuated homelessness become more evident. The purpose of the present study is to explore the temporal contiguity between the development of substance use and problem-gambling among men facing homelessness. Qualitative interviews were conducted with 31 men using shelter services who screened positive for potential problem gambling on the Canadian Problem Gambling Severity Index (CPGI). Participants were asked to speak about the development of their addictions. Narratives were categorized according to the temporal development of gambling and substance use. Content analysis was used to determine themes found in the narrative of participants from each category to explain why one addiction led to the other. The development of gambling and substance use can be viewed over the lifetime or as episode-specific. Lifetime development: Some participants developed substance use problems after developing extensive problem-gambling careers. Fewer spoke of developing problem-gambling following onset of substance use disorders, usually to find money for substance use. Men with troubled childhoods spoke of simultaneous development of substance use and problem-gambling. Episode-specific occurrence: Alcohol and drug intoxication facilitated excessive spending on slot machines and lottery tickets. In other scenarios, certain types of gambling activities (e.g., those requiring attention and focus) were followed by drug and alcohol consumption purchased with the proceeds to either celebrate wins or mourn losses. Certain types of gambling activities may lead to excessive spending when paired with alcohol and drug consumption. Early detection of problem-gambling in teens and young adults is a promising way to prevent young gamblers from developing ties to high risk social circles. Counselors should inquire about potential problem-gambling habits.

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The Many Meanings of Patient Engagement: A Unified Framework

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There are varying definitions of patient engagement in the literature. Patient engagement can be considered at the macro, meso and micro level. The objective of this study was to examine current patient engagement frameworks and to develop a unified framework that can be used for patient engagement. The academic and grey literature was reviewed for articles specific to conceptual frameworks for patient engagement. Databases searched included Ovid Medline, Ovid Health STAR, SCOPUS, and Google Scholar. Articles were included if they described a conceptual framework for patient engagement. Articles were excluded if they only described patient engagement activities. Key words and the search strategy included combining the concepts of "patient engagement AND conceptual framework OR patient centered care". Dimensions of each conceptual framework such as the patient-provider relationships, economics, and policy were considered in the unified framework. Patient engagement may refer to micro (e.g. individual patient care, including clinical interactions), meso (e.g. improved care delivery, including incorporating patient and family advisory councils), and macro (e.g. policy guidance) levels. Different levels often implied different participants and goals; key elements also varied. However, there were many recurring concepts that spanned across levels including the patient provider relationship, communication, and the role of families in patient engagement. Based on these findings, a comprehensive framework for patient engagement was created. It recognizes that optimal approaches must also take into account underlying patient characteristics including disease state, health literacy, and contextual factors such as politics, economics and the bio psychosocial context. There are multiple meanings of patient engagement and various approaches to patient engagement with different factors to consider at the micro, meso and macro levels. A comprehensive framework inclusive of multiple contexts is important in order to encourage patient engagement.

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Understanding the Multiple Vulnerabilities and Service Utilization of Homeless Youth: Findings from At Home/Chez Soi

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Given the significant limitations of existing literature on homeless youth with mental disorders, we sought to examine demographics, clinical characteristics, and service utilization patterns in a large national sample. Using baseline data from the At Home/Chez Soi field trial, a Mental Health Commission of Canada 4-year study of over 2000 homeless people with mental disorders across 5 cities in Canada, we calculated descriptive statistics for youth age 24 and under and adults over age 24, specifically examining: 1) demographics including housing history; 2) rates of mental disorders and physical illness; 3) service utilization. We then used logistic regression models to examine predictors of 3 service use variables, namely, having a regular medical doctor, feeling they needed help and did not receive it, and number of emergency department (ED) visits. Youth participants had been homeless a mean of 26.1 months. Less than one-quarter had completed high school. Nearly three-quarters had a concurrent substance use disorder. Almost half reported a learning disability. Less than half had a regular medical doctor; none of the demographic and clinical characteristics examined were significantly associated with this outcome in a multivariate model. Almost half reported not receiving health care when they needed it, associated with being female or other gender and not from an ethnoracial group. Over 60% had visited an ED in the prior 6 months; number of ED visits was increased in those with a learning disability and perceived unmet need for healthcare and decreased in those with a drug use disorder. This sample of homeless youth with mental disorders demonstrated multiple vulnerabilities, including high rates of substance use disorders, low education, learning disabilities, and inadequate, sporadic medical service use. Programs geared towards homeless youth should take these individual characteristics and service use patterns into consideration to better serve this vulnerable population.

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What happens when young and mid-life adults leave complex continuing care? Patterns of subsequent health system use and survival

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Complex Continuing Care (CCC) is a "bridge" setting between the acute hospital and the home for many young and mid-life adults with heavy care needs. It is unclear what happens to these patients when they are discharged back to the community. The study objective was to investigate whether follow-up within 7 days of discharge was associated with subsequent healthcare use and mortality. This population-based retrospective cohort study used linked administrative databases to identify 1,906 individuals who were aged 18-64 years and discharged alive from CCC in Ontario, Canada between April 1, 2005 and March 31, 2006. Individuals who received a family physician visit or home care service within 7 days of discharge were compared to those who did not based on demographic characteristics, clinical factors, functional status and survival using descriptive statistics and multivariable logistic regression models. CCC patients had high levels of functional impairment, were characterized by multiple diagnoses and were disproportionately from low-income neighbourhoods. Most patients received follow-up care within 7 days of discharge (20% received home care, 33% had a physician visit, 16% received both, and 31% received no follow-up). Controlling for individual demographic and clinical characteristics, individuals who received any community follow-up within 7 days were less likely to be admitted to an acute care hospital within one year than those with no follow-up within 7 days. Those who received homecare were less likely to be readmitted to CCC at the end of one year than people who received physician care only or no follow-up. Mortality was high with 18% and 44% dying within one and five years respectively. Community follow-up was not protective against mortality. While immediate community follow-up may reduce use of healthcare, particularly hospitals and CCC, it does not appear to impact one year mortality. Whether or not this is inevitable based on the illness characteristics of the population or preventable by managing their health and social needs in a different way, requires further research.

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Poster Presentations – Day 3

Présentations d’affiches – Jour 3

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

FONTAINE AB

A Cross-Provincial Comparison of the Policy Context of Community-based Primary Healthcare Innovations Intended to Influence Performance: Preliminary Results of a Document Review

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To identify and compare the policy context of major innovations in community-based primary healthcare (CBPHC) intended to influence performance in three regions across Canada in BC, Ontario, and Nova Scotia, with similar populations. A document review of published literature for a multiple comparative case study. We searched CINAHL, PubMed, and Dissertations & Theses. Keywords searched: 1) British Columbia, Ontario, Nova Scotia, Fraser Health, Eastern Ontario, Capital Health; 2) primary health care, primary healthcare, primary care; 3) innovation, policy, model of care; 4) teams, group practice, networks, patient enrollment, funding, financial incentives, payment models, governance, nurse practitioner, physician assistant, midwife, electronic medical record, quality improvement, patient engagement, telehealth, web-based services. We used standardized criteria across each region to analyze the literature and identify major CBPHC innovations intended to have an impact on CBPHC performance. In each region 5 major policy innovations were identified. Policy innovations included, for example: expansion of the numbers and types of providers in CBPHC; expansion of team-based models of care; implementation and expansion of information systems and data management; financial incentives and blended payment schemes; and group practices and networks. Notably, despite the common innovations, the contextual background for each region contributes to how the innovations are implemented. We present the similarities and differences across regions in CBPHC innovations and implementation strategies. Despite similar populations, policy-makers have adopted different strategies for improving CBPHC performance in three provinces. In-depth interviews of purposively selected decision-maker leads in CBPHC, providers and patients will illuminate how these innovations and their implementation strategies have influenced CBPHC performance.

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A novel method for systematic evaluation of health indicators: Perspectives from a measures producer

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Since 1999, CIHI and Statistics Canada have collaborated on development and reporting a broad range of health indicators (with more than 80 in 2013). CIHI undertook a review of 56 health system performance (HSP) indicators to evaluate their relevance for continued public reporting. In absence of an established framework for evaluation of existing indicators, the Institute of Medicine's Recommendations for Measure Selection were adapted to guide our evaluation methodology. A literature review was also performed to determine a comprehensive list of criteria used for indicator assessment. A final list of 18 criteria was identified and applied systematically to 56 HSP indicators. Additionally, the RAND/UCLA Appropriateness Method guided the internal expert ranking process using an iterative modified-Delphi approach. Recommendations were consolidated for indicators to be retained, retired, or to undergo consultation and/or research and development. Our systematic indicator evaluation plan identified nine measures as candidates for retirement, eight requiring additional consultation from stakeholders, and two to undergo research and development. Recommendations were presented at the fourth National Consensus Conference on Health Indicators (jointly held by CIHI and Statistics Canada every five years). Diverse stakeholder participants from across Canada reviewed and ratified recommendations. There was widespread support for the initiative, evaluation criteria, and process. The methodology and process have been applied successfully to measures beyond clinical administrative data, such as health expenditure indicators; efforts are underway to expand the evaluation to other CIHI data holdings (e.g. home care). Overall, this process has led to ongoing improvements to indicator methodology, enhanced stakeholder engagement initiatives, and analytical alignment within CIHI. Systematic evaluation of health indicators is important to ensure reporting relevancy, sound methodology, and production feasibility. Emphasis on high-quality actionable measures should reduce 'indicator chaos' by ensuring ongoing alignment with stakeholder needs and priorities.

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Adoption of evidence-based practices by health care organizations: a scoping literature review

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A scoping literature review was done to answer the question: What is known from the existing empirical literature about the organizational-level factors, context and processes that influence the uptake, implementation and sustainability of evidence-based practice in health care organizations? This scoping literature review used the Arksey and O'Malley (2005) framework to describe findings. Relevant studies published between January 1991 and March 2014 were identified using four electronic databases. Study abstracts were screened for eligibility by two reviewers. Following this screening process, full-text articles were reviewed to determine the eligibility of the studies. Eligible studies were then analyzed by coding findings with descriptive labels to distinguish elements that appeared relevant to this literature review. Coding was used to form categories, and these categories led to the development of themes. Thirty studies met the eligibility criteria for this literature review. The themes identified were: the process organizations use to select evidence-based practices for adoption, use of a needs assessment, linkage to the organization's strategic direction, organizational culture, the organization's internal social networks, resources (including education and training, presence of information technology, financial resources, resources for patient care and staff qualifications), leadership, the presence of champions, standardization of processes, role clarity of staff and the presence of social capital. This scoping review contains a number of implications for health care administrators, managers and providers to consider when adopting and implementing evidence-based practices in health care organizations.

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Aider les patients à retourner au travail après une dépression lorsqu'on est médecin de famille : une pratique sous influence?

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Au Canada, les médecins exercent un rôle important dans le retour au travail après une maladie comme la dépression. Vu leurs prérogatives, les compagnies qui versent des prestations d'assurance-maladie peuvent influencer les possibilités d'action des médecins. Notre objectif : décrire ces influences et leur impact selon les médecins de famille. Nous avons réalisé une entrevue semi-structurée avec des médecins de famille exerçant dans différentes cliniques du Québec et ayant une pratique diversifiée. Au total, 13 médecins ont été recrutés dans six cliniques. Les entrevues ont été enregistrées, puis transcrites. Une analyse thématique des données a été réalisée en segmentant le corpus en unités de sens, puis en classifiant ces unités selon une série de thèmes prédéterminés et d'autres, émergents. Ces thèmes ont ensuite été regroupés en deux catégories thématiques, soit les contraintes et les leviers émanant de l'assureur lors du suivi des patients absents du travail en raison d'une dépression. Notre analyse révèle l'existence de plusieurs contraintes et leviers ayant une influence sur les possibilités d'action des médecins. Des enjeux importants sont soulevés. Au niveau du patient, tout d'abord, les enjeux sont : la pertinence des soins et services offerts, la défense des intérêts du patient et le respect des besoins du patient et de ses préférences en matière de soins. Au niveau de la relation patient-médecin, l'enjeu identifié se rapporte à la collaboration du patient au traitement recommandé par le médecin, alors qu'au niveau du médecin, l'enjeu concerne son autonomie professionnelle. Enfin, nos résultats indiquent que les contraintes et leviers provenant de l'assureur génèrent aussi un enjeu au niveau sociétal, soit celui de l'équité d'accès aux services médicaux. La reprise du travail après une dépression est un déterminant du bien-être des individus et les médecins de famille y participent. Nos résultats montrent cependant qu'au Canada, les compagnies d'assurance sont en mesure d'influencer la capacité des médecins à agir dans ce qu'ils considèrent être dans l'intérêt supérieur des patients.

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An examination of perceived healthcare accessibility and unmet healthcare need among the City of Toronto

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Despite the importance of neighbourhood condition, minimal research has investigated the association between perceived neighbourhood condition and unmet healthcare need in an urban city setting. This study aimed to examine the relationship between perceived healthcare accessibility and unmet healthcare among the City of Toronto residents. We used data from project Neighbourhood Effects on Health and Well-being (NEHW), a cross-sectional survey conducted by Centre for Research on Inner City Health (CRICH) survey research unit at St. Michael's hospital. These data were collected by interviewing over 2,400 participants from 48 neighbourhoods across the City of Toronto. In this survey, individuals were asked about experience of and reason for unmet healthcare need as well as perception of healthcare accessibility. We conducted logistic regression to understand the association between perceived accessibility and unmet healthcare need, as well as unmet need arising from 1) personal choice; 2) barriers; 3) wait times. Among 2,338 respondents, 369 individuals (15.8%) reported an experience of unmet healthcare need in the past year. In relation to overall unmet healthcare need, negative perception of healthcare accessibility was associated with experience of unmet healthcare need (OR: 1.68; 95%CI: 1.15-2.45). In addition, lowest income, not having a family doctor and poor self-rated health were associated with overall unmet healthcare need. Among three sub-categories of unmet healthcare need, personal choice, barriers, wait times-related, individuals who reported negative perception of healthcare accessibility in their neighborhood were more likely to experience personal choice- and wait times-related unmet healthcare need (OR: 1.91; 95%CI:1.11-3.28/OR: 2.52; 95%CI: 1.51-4.21). Meanwhile, perceived healthcare accessibility was not associated with barriers-related unmet healthcare need. These findings suggest that neighbourhood targeted interventions are possible solutions to address unmet healthcare need in an urban city setting. For instance, personal choice- and wait times-related unmet healthcare need can be diminished by improving healthcare accessibility at the neighbourhood level, accompanied by close engagement with community-based service agencies.

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Analyse comparative de caractéristiques de la pratique des médecins de famille dans les cliniques médicales, en fonction du type de région de pratique

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Explorer les variations de diverses caractéristiques de la pratique des médecins de famille du Québec selon quatre types de région définis en fonction de la proximité d'un centre de médecine universitaire et de la densité de population : universitaire, périphérique, intermédiaire et éloignée. L'enquête internationale et pancanadienne QUALICOPC (Quality and Costs of Primary Care) dresse un portrait de l'organisation et des pratiques cliniques des médecins de famille, ainsi que de l'expérience de soins de leurs patients. Le volet québécois de l'enquête se distingue par la collaboration de partenaires-décideurs à chaque étape du projet et par le cadre conceptuel utilisé : modèle d'Évaluation globale et intégrée de la performance des systèmes de santé (ÉGIPSS). Les données sont issues de questionnaires auto-administrés remplis par 218 médecins et 1798 de leurs patients. Des analyses bivariées (Chi2) ont été menées en fonction du type de région. Selon les réponses des médecins, un bon nombre de caractéristiques de leur pratique sont relativement uniformes à travers les types de région. Toutefois, des différences significatives sont observées en faveur des régions éloignées en termes de collaboration : dans la connaissance de ressources communautaires accessibles aux patients, la fréquence de demandes de conseils à des médecins spécialistes, la fréquence de rencontres avec d'autres professionnels de la santé et la coordination des soins. La globalité des services est également plus prononcée en régions éloignées pour les actes médicaux offerts dans la clinique par le médecin ou son personnel. Par ailleurs, les modalités d'accès aux médecins de famille en termes d'horaire d'ouverture en région éloignée (et intermédiaire) apparaissent différentes comparativement à celles des autres régions. Ces résultats suggèrent une capacité d'adaptation favorable de la pratique médicale de première ligne en région éloignée, qui se distingue par un plus grand territoire à couvrir, une plus faible densité de population et des ressources plus restreintes. Le réseautage entre les professionnels de la santé semble particulièrement important.

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Analyse comparative entre les nouveaux et les anciens modèles de clinique médicale : ressources et production des services

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Examiner si les nouveaux modèles de clinique médicale mis en place au Québec selon les recommandations gouvernementales (groupe de médecine de famille-GMF) se distinguent favorablement des anciens modèles sur divers attributs souhaités visant l'amélioration des soins en première ligne, dont les ressources de la clinique et la production des services. L'enquête internationale et pancanadienne QUALICOPC (Quality and Costs of Primary Care) dresse un portrait de l'organisation et des pratiques cliniques des médecins de famille, ainsi que de l'expérience de soins de leurs patients. Le volet québécois de l'enquête se distingue par la collaboration de partenaires-décideurs à chaque étape du projet et par le cadre conceptuel utilisé : modèle d'Évaluation globale et intégrée de la performance des systèmes de santé (ÉGIPSS). Les données sont issues de questionnaires auto-administrés remplis par 218 médecins et 1798 de leurs patients. Des analyses bivariées (Chi2) ont été menées en fonction du modèle de clinique. Plusieurs différences significatives globalement favorables aux nouveaux modèles de clinique sont observées, tant dans les réponses des médecins que dans celles des patients, notamment en termes de collaboration, de continuité, d'accessibilité et de globalité, ce qui va de pair avec les attributs souhaités pour ces modèles de clinique. Entre autres, les nouveaux modèles se caractérisent par davantage de collaboration des médecins de famille avec d'autres médecins (demande de conseils auprès de spécialistes) et d'autres professionnels de la santé (travail étroit avec une infirmière clinicienne ou praticienne). Ils participent plus souvent à un système de garde les soirs et nuits en semaine. Ils ont une utilisation accrue de l'ordinateur. Toutefois, certaines différences observées entre les nouveaux et les anciens modèles de clinique pourraient être davantage marquées. Les efforts investis au Québec depuis 2003 pour développer et maintenir les nouveaux modèles de clinique, notamment les GMF, semblent porter fruit. Les partenaires-décideurs de l'étude sont d'avis toutefois que des améliorations restent à être apportées, comme le déploiement des dossiers médicaux électroniques, pour accroître la continuité des soins.

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Applying the Children with Special Health Care Needs (CSHCN) Screener to Administrative Health Data

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Administrative health data is currently an underutilized resource to explore child health. We examined how the widely used, survey-based Children with Special Health Care Needs (CSHCN) Screener could be used to identify child health problems in Canadian administrative health data. De-identified administrative data (6-10 year old children in 2006) were drawn from: Medical Services Plan, Hospital Separations, and PharmaNet, available through Population Data BC. The five indicators of the CSHCN (medication use for at least 12 months, above average health services use, activity limitations, special therapy, and counseling) were operationalized in the administrative data; children captured by one or more of the five indicators were considered to have a health problem. Analyses identified the proportion of the child population with health problems overall and by each indicator. Hospital admissions and socio-demographic characteristics were examined. Overall, 18% of children were identified as CSHCN. An estimated 14% of children used above average medical services and 5% had functional limitations; 3% were prescribed long-term medication; 2% needed/received treatment or counselling; and 0.1% needed/received special therapy. More boys (19%) than girls (16%) were identified as CSHCN. Among CSHCN, the prevalence of overnight hospital admissions (6% vs. 1%) and the percentages in families that received premium subsidies (35% vs. 21%) or lived in the lowest income quintile neighbourhoods (21% vs. 20%) were higher than among those in the non-CSHCN group. The CSHCN Screener can be operationalized using administrative health data with some limitations. Limitations emerged identifying activity restrictions, use of special therapies, and counselling for emotional and behavioural problems. These findings have important implications for identifying children with health problems based on a non-categorical measure rather than a condition-specific definition.

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Building BRIDGES, Crossing Boundaries: Collaborative approaches to learning from each other across disciplines, jurisdictions and generations

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BRIDGES brings healthcare providers and researchers together to test innovative models of care that include primary care, specialist and community services for patients with complex needs. A recent evaluation found project teams have formed an effective research collaborative with demonstrated and potential value to address system issues. BRIDGES adopts a collaborative approach to evaluate nine models of care and promote knowledge transfer across interdisciplinary teams. This enables cross-project exchange and greater cumulative learning at the team, collaborative and system levels. Teams gain practical insight on model development, implementation, and evaluation, with technical support when needed. At the collaborative level, teams, academic experts, policy makers and administrators share lessons, discuss challenges and suggest potential solutions. BRIDGES is co-led by the departments of medicine, family medicine and psychiatry at the University of Toronto, and has conducted a cross-project qualitative meta-evaluation in addition to supporting the evaluation of specific projects. The collaborative has supported 9 projects, with 28 clinical champions across 23 institutions with links to system stakeholders. The mixed method evaluations include 2 interrupted time series, 3 propensity matched cohorts and 3 randomized trials. It supplemented team capabilities with study design, data management, qualitative and economic evaluation, as needed. It promoted sharing of outcome measures, patient management techniques and primary care engagement strategies. Several projects have merged in specific sites to facilitate intake and share patients where relevant. At the system-level, BRIDGES is sharing learning with other stakeholders including the government, provincial agencies and clinician leaders. This collaborative approach has been adapted to evaluate 35 medically complex patient demonstration projects and the results are informing provincial integration efforts. The BRIDGES collaborative approach shows great potential as a mechanism to encourage teams to connect, share and learn from each other. Leveraging the experiences of multiple sectors and teams to promote collective impact requires trust, and this can be supported with time, sustained effort, and leadership from a structure like BRIDGES.

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Capturing activities performed by pharmacists in primary care interprofessional teams in Ontario (FHTs)

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An Inter-professional primary care model, the Ontario Family Health Team (FHT), was established in Ontario 10 years ago. Today, 191 practices operate in that model, and 111 (58%) host a pharmacist. Little is known about the role these health professionals play in that setting. We sought to understand their activities. We constructed a survey using information on expected activities obtained from semi-structured telephone interviews with 10 purposefully selected pharmacists working in a FHT. The survey consisted of a list of activities, grouped into 5 main and 20 sub categories. Participants were asked to estimate the percentage of time spent on each category of activities. Free-text response questions allowed participants to elaborate on any question and to identify activities not listed. The survey was web-based, and all 155 FHT pharmacists were invited to complete it. The survey results were analyzed using descriptive statistics and content analysis for open-ended responses. 70 (45%) completed the survey. Mean respondent age was 43 (SD 10) years, experience working in a FHT was 4 (SD 3) years. Nearly half worked full time (33/70, 47%). The "intensity" (FTE/MD) varied greatly across practices. Almost all reported being engaged in "direct patient care; managing single therapeutic issues including involvement in clinics" (94%), and providing "education and drug information in an informal approach to clinicians" (84%). The majority reported conducting "general medication reviews" (66%) and "medication reconciliation post hospitalization" (59%). Pharmacists were most commonly involved in smoking cessation (61%) and diabetes (57%) clinics. Pharmacists felt they could make the most impact on reducing inappropriate prescribing (91%) and polypharmacy (87%), and on improving patient medication compliance (91%) and physician adherence to recommended guidelines (81%). Pharmacist activities and intensity varied across practices. Our next step is to link this data to health administrative data and assess the association between factors and measures of medication appropriateness, adherence to recommended guidelines, and hospitalizations.

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Clinical preventive services in primary care settings: a substudy using data from the Quality and Cost of Primary Care (QUALICOPC) cross-sectional study

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Besides providing curative care, primary health care (PHC) practices also offer clinical preventive services (counselling, screening, immunization and preventive medication). Delivery of such services in the context of PHC practices is challenging. Study objective is to evaluate how provision of preventive services varies across PHC models in Quebec, Canada. This study uses family physician (FP) survey data from the QUALICOPC study, a cross-sectional study to evaluate the performance of the overall health care system. Participants: 218 FP practicing in solo or group practices in various geographic locations. Outcome measure: physician-reported clinical preventive services delivery rates. Data analysis: Bivariate analyses to investigate the relationship between preventive service delivery and PHC models or practice geographic location. Multiple logistic regressions to assess factors associated with delivery of preventive services. Hypothesis: preventive services delivery rates are higher in the Family Medicine Groups compared to traditional settings due to requirement for greater service provision. 97% and 40% of FP routinely measure blood pressure and blood cholesterol level in office contacts with adults regardless of the reason for visit, respectively; there was no statistically significant difference between rates across PHC models. More than 90% of FP are involved in counselling on lifestyle change in connection with normal patient contacts; statistically significant differences between rates were observed across PHC models. 73% of FP are involved in influenza vaccination; statistically significant differences between rates were observed across geographic locations. More than 70% of FP working with practice nurses indicated that these last independently provides preventive services; statistically significant differences between rates were observed across PHC models. Complete study findings including analysis of the merged Canadian QUALICOPC dataset will be available in March. Results suggest higher rates of preventive services delivery in the Family Medicine Groups compared to traditional settings. Complete study findings could inform decision-making about performance of the health care system in regard to preventive services delivery in Quebec and Canada.

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Community Pharmacy Response to a New Provincial Drug Plan Reimbursement Policy

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The purpose of this study was to gain insights on community pharmacies' implementation of Ontario's first government-reimbursed medication management services: MedsCheck (MC), an adherence-focused medication review between pharmacist and patient; and pharmaceutical opinions (PO), pharmacists' prescriber-directed recommendations for addressing identified drug therapy problems. In this qualitative study, 44 semi-structured interviews were conducted with 16 corporate executives (representing banner, chain, franchise, and food store/mass merchandiser pharmacies), 12 pharmacy managers (at least one per participating corporation), 12 pharmacy owners, 5 external stakeholders (government and pharmacy organizations), and 2 recent pharmacy graduates. For the pharmacy owners/managers, purposive sampling was used to obtain diversity in location, ownership type, and prescription volume. Interviews were conducted by telephone or in person. Transcripts were coded and descriptive content analysis used to identify themes in the data. MedsCheck implementation included systematic and ad hoc corporate and pharmacy-level strategies. The most common were infrastructure change (eg. computer technology, construction of private space), pharmacist training (especially for MedsCheck Diabetes), and marketing strategies. A less common but noteworthy strategy was setting target numbers for completed MCs. Some participants viewed targets as a positive incentive and others as problematic and unprofessional. Common continuing challenges were lack of time, low patient awareness or cooperation, need for pharmacist behavioural change, and economic pressures. Perceptions of service quality were variable, with external stakeholders and pharmacy owners/managers more concerned about quality than corporate executives. For POs, underbilling was a consensus theme, attributed to restricted patient eligibility and unclear service criteria. Overall, implementation strategies were perceived to be successful. Community pharmacy corporations invested in systematic strategies to facilitate implementation of medication management services. These services are now largely viewed as normal pharmacist practice and a source of professional satisfaction. Provision of MC and POs was motivated by complementary but competing objectives of enhancing patient outcomes and increasing pharmacy revenues.

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Developing Drug Prescribing Profiles for Family Physicians Using Electronic Medical Record Data

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The Drug Utilization 90% (DU90%) measures the number of drugs accounting for 90% of all prescribed drugs over a period of time. The purpose of this project was to use the DU90% to develop drug prescribing profiles for family physicians using electronic medical records (EMR) data. The Maritime Family Practice Research Network (MaRNet-FP) is a regional network of the Canadian Primary Care Sentinel Surveillance Network (CPCSSN). All prescriptions written for patients with diabetes in 2013 by 29 consenting community Nova Scotia family physicians of MaRNet-FP were extracted from the Nightingale EMR. The prescription records were cleaned and coded. The DU90% was calculated and used to create prescribing profiles for the physicians. The 29 family physicians created 41,184 prescriptions for 2723 patients with diabetes in 2013. Our experience with cleaning and coding prescriptions from EMR data and the number of drugs that make up 90% of the top drug classes prescribed by the 29 family physicians will be presented. The DU90% has been used successfully in several countries to provide feedback to physicians on their drug prescribing in order to affect change in practice. Aggregate physician prescribing profiles can determine if there are any drug prescribing issues which can lead to targeted education and interventions.

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Facteurs associés au fait d'avoir ou non un médecin de famille

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Documenter les caractéristiques associées au fait d'avoir un médecin de famille (MF) dans les deux régions les plus populeuses du Québec (Montréal et la Montérégie), les raisons liées au fait de ne pas avoir de médecin de famille et l'impact d'avoir un médecin de famille sur l'expérience de soins. Une enquête téléphonique sur l'utilisation des services et l'expérience de soins a été réalisée en 2010 auprès de la population adulte de Montréal et de la Montérégie (n=9180). Les raisons liées au fait de ne pas avoir de MF ont été documentées auprès des patients sans MF. Des indices d'expérience de soins (accessibilité, continuité, globalité) et d'exposition aux services préventifs ont été calculés pour chaque patient à partir de questions référant à l'expérience vécue auprès de la source habituelle de soins de première ligne au cours des deux années précédant l'enquête. 70,3% des répondants ont déclaré avoir un MF et 13,4% n'avoir ni MF ni source habituelle. Avoir un MF est significativement ($p \leq 0,05$) plus fréquent chez les femmes (OR 1,75) et les personnes avec maladies chroniques (OR 2,38), augmente avec l'âge (65 ans ou plus: OR 5,13) et le niveau économique (niveau élevé: OR 2,23). 42% des patients sans MF ont déclaré ne pas en avoir besoin (davantage les hommes, les personnes plus jeunes et celles sans maladie chronique) et 58% ont déclaré ne pas avoir trouvé de MF prenant de nouveaux patients. Parmi ces derniers, 25% ont au moins un problème de santé chronique. Les scores d'expérience de soins, à l'exception de l'accessibilité, sont plus élevés chez les patients ayant un MF. Bien que certaines personnes considèrent ne pas avoir besoin d'un MF (notamment les plus jeunes sans maladie chronique), des raisons organisationnelles liées à la disponibilité des ressources sont souvent invoquées par les personnes sans MF, ce qui est particulièrement préoccupant dans le cas des personnes atteintes de maladies chroniques.

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Generic atorvastatin: The impact of physician detailing and sampling in Manitoba

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In 2011, Manitoba implemented a province-wide program of physician detailing and free sampling for generic atorvastatin. As there are no rigorous data on the efficacy of a combined program of detailing visits and sample provision on generic drug use, we examined the impact of the program. We conducted a retrospective study of Manitoba insurance claims data for all patients who filled one or more prescriptions for a statin between 2008 and 2013. We assessed policy-related changes in the use and cost of statin medicines, market share of generic statins, and choice of starting statin for new users. We also used linked data on the number of physician visits and sample provision to analyze whether the impact of the program varied based on the number of visits conducted. The detailing program reached 651 of the 2,103 physicians who prescribed a statin during the study period, with 5,154 total visits. High-prescribing physicians were visited most frequently by the detailers. The program did not appear to influence the overall statin prescription rate, modify the decline in total cost of statins that began when the generic was introduced, or result in a sustained increase in the number of patients switching to or starting on generic atorvastatin. Stratified analysis revealed modest increases in the level of statin prescribing for physicians visited 3 or more times after the implementation of the program. The greatest increase occurred in the group visited 9 or more times, where prescribing increased by 7.6 statin prescriptions per physician per month (8% increase). Though physician detailers were skilled at targeting high prescribing physicians, a combined program of detailing visits and sample provision did not appear to increase the overall prescription rates or decrease the cost of statins prescribed. The introduction of generic atorvastatin alone appeared sufficient to modify prescribing patterns and decrease costs.

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Guidelines for the Reporting of studies Conducted using Observational Routinely-collected health data (RECORD): An extension of the STROBE reporting guidelines

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Routinely-collected health data, obtained for administrative and clinical purposes without specific a priori research goals, are increasingly used for research. The rapid evolution and availability of these data have revealed issues not addressed by existing reporting guidelines, such as STROBE. The RECORD statement was created to fill these gaps. A large, international group of stakeholders (http://record-statement.org/group.php) was recruited reflecting the diversity of researchers and consumers of research using routine collected health data. Stakeholders participated in two consecutive modified electronic Delphi surveys. The first asked for themes deemed important for the RECORD statement, and was analyzed using qualitative methods. The second requested quantitative prioritization of the themes for each manuscript heading (abstract, introduction, etc.). The surveys were followed by a meeting of the RECORD working committee, and re-engagement with stakeholders via an online commentary period. Drafting of the final RECORD reporting guidelines was informed by this multi-stage participatory process. The qualitative survey (76 responses from 123 surveys sent) generated 10 overarching themes and 13 specific themes derived from existing STROBE categories. Highest-rated overall themes for inclusion were: "Disease/exposure identification algorithms"; "Characteristics of the population included in databases"; and "Characteristics of the data". In the quantitative survey (71 responses from 135 surveys sent), the importance assigned to each of the compiled themes varied depending on the manuscript section to which they were assigned. Following the working committee meeting, online ranking by stakeholders provided feedback for revision of the final checklist, which will be presented at the CAHSPR Annual Meeting. Following publication, the checklist will be available at record-statement.org The RECORD statement addresses issues specific to observational research using routinely-collected health data. Stakeholder responses pointed to unique aspects of research using these data, including the need for better reporting of methodological issues. Through implementation of RECORD, authors, journals editors, and peer reviewers can encourage transparency of research reporting.

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Health Economic Analysis of Genomic-Informed Approaches for Lymphoid Cancer Management – A Multifaceted Platform

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As the pace of advancement in genomic technologies increases, so too does the need for rigorous health economic analyses. A team of researchers at the British Columbia Cancer Agency is developing a research platform for analysis of health economic evidence, as it applies to genomic-informed treatments for lymphoid cancer. As part of a large-scale research project looking at personalized treatment of lymphoid cancer, the health economics component is helping bridge research-based analyses and clinical applications through a variety of activities. These include: a time-motion study of the timing and resource requirements for various genomic assays, including targeted sequencing, of routinely-collected patient samples; a 'real-world' analysis of costs, resources and disease survival experienced by a retrospective cohort of patients previously treated for lymphoid cancer without consideration of genomic analysis; and development of a modifiable health state transition model to assess the cost-effectiveness of current and new cancer treatments. Each component of the economics platform is currently underway. Treatment-specific costs, resource utilization patterns and patient outcomes (i.e., overall survival) of a retrospective cohort of lymphoid cancer patients are being analyzed, and will be used to inform the health state transition model. The results from the time-motion study will be used to identify the major cost drivers associated with the genomic assays and technologies, as well as provide cost estimates for these analyses in a 'real world' setting. The health state transition model provides a platform for the research team to answer several hypothetical scenarios including the introduction of new treatments for the target population, changes in clinical management, and demographic changes that may affect the incidence and prevalence rates of lymphoid cancer. Incorporating economic analysis into this project allows for the evaluation of technologies and treatments that are either currently available, or forthcoming, in lymphoid cancer management. The results from this research platform have the potential to influence and inform medical decision-making in everyday clinical practice within BC.

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Health Services Utilization and Costs Associated with Co-Morbidity in Older Adults with Diabetes

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To describe health services utilization and associated costs over 5 years among a cohort of community-dwelling older adults in Ontario with diabetes according to number of co-morbid chronic conditions. This study is part of a research initiative to develop and evaluate community-based management programs for specific chronic conditions, including diabetes. We used administrative health data to identify all community-dwelling adults aged 66 and older with diabetes as of April 1, 2008 (baseline). Their use of health services covered under the provincial insurance program was obtained for 5 years following baseline. Physician and home care costs were calculated by multiplying service volumes (total visits or hours) by unit costs; acute care costs were calculated by multiplying per diem rates by total days from visit and length-of-stay data. To explore the extent to which service volumes drove changes in total costs over the 5 years, we held costs constant to 2012 dollars. There were 376,421 individuals with diabetes at baseline (mean age 75 years, 49.8% female). Only 5% had no co-morbidity while 46% had 3 or more. Use of all health services increased with co-morbidity but the greatest increases were for hospitalizations and emergency department visits. All service use, except primary care, increased over 5 years among those without co-morbidity but not for those with 3 or more. Average annual per patient cost varied five-fold by co-morbidity in 2008 but decreased over the 5 years, due to increased costs in those without co-morbidity. The main cost drivers were any physician visits in those without co-morbidity but hospitalizations and specialist visits in those with 3 or more. Service use was consistently greater for non-diabetes-related than diabetes-related reasons. Diabetes frequently co-occurs with other chronic conditions, which is associated with greater service use, higher costs, and different drivers of overall costs. There was little change in per patient costs over time but the difference by number of co-morbidities narrowed largely due to increased service use among those without co-morbidities.

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Health Systems and Other Factors Maternity Care Providers Consider When Counselling Pregnant Women with a Previous Cesarean Section on Delivery Method

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Non-medically indicated planned repeat C-sections are associated with increased risks to maternal/newborn health, increased health care system cost and added strain on the already existent shortage of maternity care providers. We examined issues maternity care providers consider in counseling pregnant women with a previous C-section on method of delivery. In Phase 1 of our larger mixed methods 2 phase study we used a qualitative descriptive approach in which we did in-depth interviews with 30 maternity care providers (Obstetricians, Family Physician and Midwives) from across Ontario. A semi structured interview guide was used to explore the factors they considered in counselling pregnant women with a previous C-section about delivery method with this pregnancy. Qualitative content analysis was used to analyze the data. Preliminary analysis revealed that many maternity care providers considered several structural factors when counselling women whether to have a trial of labour (TOL) or a repeat C-section. These included the availability of anesthesiologists and operating room staff in an emergency situation. Some considered the distances their patients needed to travel to deliver. Interestingly a few providers stated that their hospitals did not support TOL. Many also stated that they were influenced by their own negative past experiences with either elective repeat C-sections or TOL. Some providers stated they discussed the options with the women and left the decision to the women. The findings highlight the complexity of the issues maternity care providers consider when counselling women on birth methods. Some of these issues, like the absence of emergency c-section capacity in some hospitals are problematic. If we want to decrease repeat C-section rates, addressing structural issues effectively will be necessary.

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Higher cesarean delivery rates are associated with higher infant mortality rates in industrialized countries

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Recent data indicate that more than half of high-income industrialized countries have a cesarean delivery rate of >25%, which is higher than the appropriate level considered by most health professionals worldwide. Data for 31 high-income industrialized countries in 2010 (or the nearest year) obtained from WHO, OECD, World Bank, and individual countries were analyzed in this study. We examined the correlation between caesarean delivery rate and infant mortality rate with Pearson correlation coefficient analysis, and examined the independent effect of cesarean delivery on infant mortality with multiple linear regression analyses. The cesarean delivery and infant mortality rates varied substantially among the included countries: from 15.6% to 50.0% and from 1.9 per to 6.8 per 1,000 live births, respectively. Cesarean delivery rates were positively correlated with infant mortality rates (Pearson correlation coefficient: 0.41, $P < 0.05$). The association remained after adjustment for maternal age, infant sex, per capita GDP, and the Gini index ($P < 0.03$), but disappeared after further adjustment for preterm birth ($P = 0.07$). In a sensitivity analysis, the results were not appreciably affected by excluding births at < 22 weeks of gestation, by weighting the data by the number of births in each country, or by excluding data from particular countries with possible measurement issues (USA, Greece). A higher cesarean delivery rate is associated with higher infant mortality rate among these high-income industrialized countries. One of the mechanisms by which cesarean delivery affects infant mortality is through iatrogenic prematurity.

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Hospitalizations and mortality in publicly funded for-profit and not-for-profit long-term care facilities: A population-based retrospective cohort study

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To establish if proprietary status (i.e., for-profit or not-for-profit), is associated with mortality and hospitalizations among publicly funded long-term care (nursing) homes. We conducted a retrospective cohort study examining all incident admissions to all Ontario long-term care facilities between January 1, 2010 and March 1, 2012. We calculated adjusted rates of hospital admissions and mortality, per 1,000 person-years (PY) of follow-up, among for-profit and not-for-profit facilities at 3, 6, and 12 months post-admission. We examined 640 publicly funded long-term care facilities in Ontario, Canada (384 for-profit, 256 not-for-profit). 53,739 incident admissions were captured between January 1, 2010 and March 1, 2012. One-year following admission, 12.1% of residents died while 21.6% had at least one hospitalization prior to discharge. After 12 months of follow-up, residents in for-profit facilities had a crude mortality rate of 198 per 1,000 PY versus 174 per 1,000 PY in not-for-profit facilities. During the same period, hospitalization rate in for-profit facilities was 401 per 1,000 PY versus 306 per 1,000 PY in not-for-profit facilities. At 3, 6 and 1-year post admission, for-profit facilities had an adjusted hazard ratio of 1.21 (95% confidence interval (CI): 1.11-1.31), 1.17 (95% CI: 1.10-1.25) and 1.12 (95% CI: 1.06-1.18) for mortality and hazards of 1.34 (95% CI: 1.26-1.42), 1.30 (95% CI: 1.24-1.37) and 1.24 (95% CI: 1.19-1.29) for hospitalizations, respectively. Publicly funded for-profit facilities have significantly higher rates of both mortality and hospital admissions.

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Identifying Quality Indicators for Palliative and End-of-life Care from Administrative Data

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Interest in palliative and end-of-life care, and efforts to expand and improve its delivery in Ontario has been growing over the past few years. This study aims to identify meaningful, health-sector specific quality of care indicators that can be captured using the rich health administrative databases available in Ontario. The authors used a scoping review technique to search for peer-reviewed journal articles using MEDLINE and EMBASE databases containing quality indicators for palliative care. Additionally, relevant grey literature was also searched. Indicators were selected based on relevancy and feasibility of measurement through Ontario's administrative datasets. A total of 72 journal articles and 40 grey literature pieces were found from which a total of 1021 indicators were extracted. From these indicators, duplicates and redundancies were removed and the final list was grouped by health care sector such as acute care, home care and long-term care. Next steps include running a modified Delphi to elicit recommendations from stakeholders on the most important measures. The resulting indicators will be measured across health regions in Ontario and will help inform the work of organizations such as Health Quality Ontario and the Declaration of Partnership and Commitment to Action.

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Inequalities in Early Child Development in Canada

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To examine the influence of income level and sex on child development and readiness to learn at school. To highlight initiatives and interventions that contribute to equitable access to strong nurturing environments for all children which contribute to healthy child development. The indicator 'Children Vulnerable in Areas of Early Development' calculated using data collected by the Early Development Instrument (EDI) was used for this analysis. This indicator measures vulnerability rates across five areas of development (physical health; social competence; emotional maturity; language and cognitive development; and communication skills and general knowledge) in populations of children at age 5. Vulnerability rates were examined by neighbourhood-income quintile and sex across Canada. Academic and grey literature was scanned to study initiatives and interventions aimed to support healthy child development especially in at-risk populations. In Canada, one in four children (26%) was vulnerable in at least one area of development. Neighbourhood-income level was a powerful predictor of vulnerability. In particular, the lowest rates of vulnerability (19.5%) were observed in the children from highest income neighborhoods compared to 34.9% for those in lowest income neighbourhoods. Sex differences were also observed with vulnerability rates higher in boys (32.9%) compared to girls (19.0%). Boys in the lowest income neighbourhoods had even higher vulnerability rates (42.3%) compared to girls in the lowest income neighbourhoods (27.3%). Boys who were vulnerable in at least one area of development showed highest vulnerability in Emotional Maturity (50.9% of boys were vulnerable in this area), while girls showed highest vulnerability in Communication Skills and General Knowledge (45.2%). Our analyses revealed that neighbourhood-income and sex are strong predictors of vulnerability rates in child development. Moreover, the effect of income is more pronounced in boys than girls. This research demonstrates the need for targeted interventions for lower income neighbourhoods along with universal approaches for early child development in Canada.

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Influence of Electronic Medical Record Implementation on Provider Retirement at a Major Academic Medical Center

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The push for electronic medical record (EMR) implementation is grounded on increasing efficiency and cost-savings. With the increase in dependence on the EMR for patient care and documentation, we hypothesized an increase in provider dissatisfaction. Our objective is to investigate the effect of EMR implementation on provider attrition. An extensive literature review was completed, with no prior published data that have analyzed the effect of EMR implementation on provider attrition. We completed a retrospective study investigating whether medical provider attrition, clinical M.D. or equivalent, coincided with EMR implementation. Our hypothesis was that the EMR implementation is associated with increased attrition of an older provider cohort. We analyzed monthly provider attrition rates and mean age at attrition 24 months preceding the EMR 'go-live' date at our institution and 24 months after. The go-live date at our institution was July 1 2013. 208 provider departures occurred between from July 2011 and June 2014. The attrition categories were classified as "departure" (n = 137, 65.9%), "emeritus" (n = 30; 14.4%), "no specified reason" (n = 26; 12.5%), and "not reappointed" (n = 15; 7.2). The most common degree held by departing providers was "MD" (n = 170; 81.7%). Most departures occurred in June 2013 (n = 24). The mean provider age at departure was 46.4 years +/- 2.9 years for June 2012, 48.1 years +/- 2.5 years for June 2013, and 45.0 years +/- 4.1 years for June 2014. Our data indicates a trend for both an increase in number of departing providers, as well as an increased mean age in the month immediately prior to EMR implementation. To date, no other investigation of the effect of EMR implementation of provider retirements have been published. We speculate on potential influences of EMR implementation on provider attrition, including the steep learning curve for new technologies as well as the changes to daily clinical workflow inherent to EMR use.

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Introducing an interprofessional team for the management of stable rheumatoid disease to improve access to care

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Rheumatoid disease (RD) patients face challenges with accessing care which can have profound effects on their disease prognosis. The current supply of rheumatologists cannot meet demand for services. We aimed to understand the potential of using alternative providers in the case management of stable RD to improve wait times. We used a case study approach to conduct an in-depth assessment of an RD clinic in Alberta. We conducted a document review to understand the current intake process and the staff associated with the various steps. Interviews were conducted with managers to learn about staff roles, responsibilities, process, bottlenecks, challenges and solutions. Staff interviews focused on professional background, knowledge and skills required for the role and challenges faced by staff. Interview findings were reviewed against scope of practice regulations for a range of health care providers to determine if alternate providers may in fact perform the current roles. The RD clinic refers appropriate patients directly to a general rheumatology or specialty clinic. Screening and assessment are completed at these clinics. Due to the unique nature of RD, patients require regular monitoring for disease indicators limiting the number of available appointments for new patients. This delay in access for new patients can increase the likelihood of permanent joint damage and lower their chance of remission. Our results showed that introducing an interprofessional team comprised of providers working in an advanced role (e.g., physiotherapists, nurses) could mitigate the risk of deterioration for patients on a wait list. This team could provide ongoing follow-up to stable patients thereby opening spaces for rheumatologists to screen and assess new patients. Ultimately, wait times and health outcomes would improve. An interprofessional team could improve bottlenecks specifically related to the assessment and management of stable RD patients. Including a broader range of providers in the screening and assessment process can improve patients' prognosis, enhance the patient care experience and address current access issues.

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L'évolution des urgences au cours des dix dernières années au Québec

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Comprendre l'évolution de l'utilisation des urgences au Québec au cours des dix dernières années ainsi que les facteurs qui peuvent avoir un impact sur l'encombrement des urgences. À partir des tendances observées, faire une projection sur l'utilisation des urgences dans les dix prochaines années à venir. L'utilisation des urgences dans les dix dernières années a été analysée à partir du registre des patients sur civière. Cette banque de données contient l'information sur l'ensemble des visites dans les hôpitaux du Québec et permet de déterminer, entre autres, l'âge, le sexe et le type de patients. Nous avons considéré deux types de patients qui arrivent aux urgences, à savoir les patients qui sont couchés sur civière et les autres patients, dits ambulatoires. Les analyses tiennent compte de la croissance démographique et portent sur l'utilisation des urgences, les hospitalisations, les soins à domicile et les comparaisons régionales En 2012-2013, près de 3,4 millions de visites ont été effectuées dans les urgences du Québec, et ce, pour une population de 8,1 millions de personnes. Environ un tiers de ces visites sont des visites sur civière. Les cas les plus urgents représentent moins de 40 % des visites. Le nombre total de visites est resté relativement stable dans les dix dernières années, malgré l'accroissement de 8% de la population. Toutefois, les patients qui se présentent à l'urgence sont beaucoup plus âgés. En 2003-2004, une visite sur civière sur cinq (21,3 %) était faite par une personne de 75 ans et plus. En 2012-2013, c'est le cas d'une visite sur quatre (26,5 %). Dans le même temps, le séjour moyen est passé de 3,1 à 4,6 heures pour les visites ambulatoires; et de16,6 à 18,4 heures pour les visites sur civière. Dans les dix dernières années, le taux de visites à l'urgence a baissé chez les moins de 75 ans, mais il est resté stable chez les personnes plus âgées. Comme la population vieillit rapidement on observe donc un vieillissement important de la clientèle aux urgences.

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Laying the foundation for primary care performance measurement: Lessons from Ontario

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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, has developed a Primary Care Performance Measurement (PCPM) framework for Ontario. The Steering Committee (SC), comprising senior representatives of 22 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 SC established Measures and Technical Working Groups that included data and policy experts and patient and provider representatives. For each priority measurement area, members of the Measures Working Group ranked a set of potential measures. Guided by the rankings and a set of relevance and validity considerations, the Measures Working Group selected specific measures. The Technical Working Group then identified technical specifications, appropriate data sources and required infrastructure. The SC recommended specific measures in eight domains: Access, Patient-Centredness, Integration, Effectiveness, Focus on Population Health, Efficiency, Safety and Appropriate Resources. Equity — the ninth domain — will be assessed by applying a recommended set of economic, demographic and social variables to the performance measures in the other domains. At the system level, 48 (27%) of the 179 recommended measures are currently available at the Local Health Integration Network level and 90 measures (50%) are available at the provincial level. At the practice level, only 15 (13%) of the 112 practice-level measures in the PCPM framework are widely available to primary care clinicians. The SC recommended a series of implementation activities, including the selection of high-priority subsets of practice and system level measures that could measured and reported in the near future. Other jurisdictions developing systems for monitoring and reporting on primary care performance can benefit from lessons learned in Ontario related to stakeholder and patient engagement and resources requirements. If properly aligned, similar processes in other provinces can build the foundation for a coordinated and sustainable approach to measure primary care performance in Canada.

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Le ‘benchmarking’ au sein des organisations de réadaptation: l’utilisation d’indicateurs de performance et les facteurs d’influence

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L’Association des établissements en déficience physique du Québec (AERDPQ) regroupant les Centres de réadaptation en déficience physique (CRDP) de la province a développé deux outils de performance afin de stimuler la comparaison et l’amélioration de la performance de leurs organisations membres. L’objectif de cette étude était de comprendre comment les indicateurs de performance inclus dans ces outils ont été utilisés et explorer les facteurs qui ont favorisé ou restreint cette utilisation. Démarche : des entrevues semi-structurées avec des informateurs clés des CRDP ont été réalisées. Une analyse thématique s’appuyant sur les théories de l’implantation des innovations a été effectuée afin d’identifier les facteurs d’influence. Les CRDP ont été catégorisés en utilisateurs importants vs faibles des indicateurs de performance. L’utilisation était catégorisée d’importante si l’utilisation était ciblée et/ou politique (axée sur le changement) et catégorisée de faible si elle était passive. Au total 16 établissements ont accepté de participer, représentant 87% des régions socio sanitaires du Québec. De ces 16 CRDP, 10 ont fait une utilisation importante des indicateurs de performance et 6 en ont fait une utilisation faible. Trois facteurs principaux ont permis de distinguer les utilisateurs importants des utilisateurs faibles: les caractéristiques des outils de performance, le leadership des décideurs et les ressources disponibles. Quatre facteurs communs ont été identifiés à travers les 16 CRDP peu importe leur niveau d’utilisation des indicateurs de performance: la compatibilité de l’information de performance avec les besoins organisationnels, la nécessité de se doter d’indicateurs de performance, la complexité / simplicité de l’information de performance et le soutien offert aux CRDP par leur association l’AERDPQ. L’étude démontre l’importance de définir les besoins spécifiques de ‘benchmarking’ des organisations de santé afin d’identifier la nature des indicateurs de performance nécessaires à une analyse comparative pertinente et de qualité.

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Les médecins de famille peuvent-ils réellement contribuer à prévenir l’incapacité prolongée de travail secondaire à un trouble dépressif?

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La dépression constitue une cause importante d’absentéisme, ce qui interpelle les médecins qui doivent certifier l’absence-maladie et encadrer le retour au travail (RAT). Malgré leur potentiel pour prévenir l’incapacité prolongée, les pratiques des médecins restent peu documentées et leur pertinence, souvent mise en doute. Notre objectif : décrire ces pratiques. Nous avons réalisé une série d’entrevues semi-structurées avec des médecins de famille (n=13) et des professionnels de la santé mentale (n=6). Les participants ont été recrutés au Québec dans deux secteurs présentant un contraste dans la disponibilité de leurs ressources publiques en santé mentale (ex : délai pour une consultation psychiatrique et une psychothérapie). Une analyse thématique des transcriptions d’entrevues a été réalisée, d’abord en segmentant le corpus en unités de sens, puis en classifiant ces unités selon une série de thèmes prédéterminés et d’autres, émergents. Une analyse transversale a ensuite permis de révéler des patrons entre les pratiques étudiées. Nos résultats révèlent que l’enjeu du travail constitue une préoccupation partagée par les médecins rencontrés, mais qu’il existe de la variation dans la façon dont cette préoccupation se traduit dans leurs pratiques. Deux profils se distinguent. Le premier se caractérise par une intégration de l’objectif de RAT à l’objectif de traitement dès la signature de l’arrêt de travail et par la mise à contribution du milieu du travail, quoique de façon indirecte. Le second se caractérise par une pauvreté d’actions précoces orientées vers le RAT et par des actions teintées d’une attitude suspicieuse envers le milieu de travail. Quel que soit le profil de pratique, cependant, l’action concertée des médecins avec les autres professionnels de la santé impliqués demeure l’exception plutôt que la règle. Certaines pratiques médicales documentées dans notre étude (profil 1 notamment) concordent avec les recommandations des modèles d’intervention reconnus en prévention de l’incapacité prolongée de travail. Ces résultats soulignent, d’une part, le rôle significatif des médecins de famille en la matière et, d’autre part, ouvrent des avenues pour la formation continue.

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Les patients ressources, acteurs incontournables dans l’amélioration des soins aux patients ayant vécu une amputation traumatique du membre supérieur

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Cette recherche porte sur l’évaluation de l’apport de patient ressource au Centre d’expertise en réimplantation ou revascularisation microchirurgicale d’urgence (CEVARMU) du Centre hospitalier de l’Université de Montréal (CHUM) afin de favoriser la réduction de la perception du handicap chez ces patients. Le CEVARMU est le seul centre d’expertise en réimplantation au Canada. Depuis 2010, il fait appel, sur une base ponctuelle, à d’anciens patients ayant terminé leur processus de réadaptation afin d’accompagner et de soutenir les patients dans leur propre processus de soins. Considérés comme des partenaires à part entière de l’équipe, ces patients ressources rencontrent les patients hospitalisés ou qui sont en processus de réadaptation sur une base bénévole afin de témoigner de leur expérience et de s’assurer que les patients participent à l’élaboration des plans de traitement qui répondent à leurs besoins et qu’ils les comprennent bien. Les analyses préliminaires des entrevues réalisées auprès de professionnels (n=7), de patients ressources (n=4) et de patients (n=10) et de la documentation produite par le CEVARMU, ont pu mettre en évidence la nature de l’intervention réalisée par les patients ressources auprès de patients et sa complémentarité par rapport aux interventions des professionnels du Centre. De plus, les analyses ont pu mettre en évidence que cette intervention permet d’améliorer l’adhésion au traitement, de réduire potentiellement de 15% la perception de l’handicap par les patients, et d’avoir un impact positif sur leurs expériences de soins. Enfin, une résistance des professionnels à la venue de ce nouvel acteur dans les soins notamment au regard de la redéfinition des rôles et des identités a également été mis en évidence. La formalisation des savoir-faire du patient ressource au CEVARMU est un moyen prometteur pour augmenter l’auto-efficacité et l’adhésion aux traitements des patients. Ce modèle de formalisation démontre un potentiel élevé de transférabilité aux autres secteurs de la santé pour favoriser un continuum de soins du patient intégré soutenu par l’expertise du patient ressource.

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Managing Complexity in Primary Health Care: Developing and piloting a person-centred mobile application for patients with complex chronic disease and disability

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Patients with complex chronic disease and disability (CCDD) have multiple chronic conditions, experience symptoms that impact their daily lives, and are among the highest users of the health system. Our objective was to develop a patient-centred mobile application to improve care for patients with CCDD in primary care settings. A multi-phased user-centred design method was used to build a tool to meet both CCDD patient and provider needs. Development and usability testing was conducted with patients and providers from the Bridgepoint Family Health Team in Toronto, Ontario and experts in the fields of eHealth, multi-morbidity symptomology, and CCDD patient needs. Initially, focus groups with CCDD patients and their caregivers and interviews with providers and experts were conducted to identify user-needs. A prototype was refined through working groups with patients, providers and experts. Finally, a 4-week usability pilot was conducted to assess the tool’s efficiency, effectiveness, satisfaction and learnability. After conducting and qualitatively analyzing data from four focus groups with 14 patients and caregivers, eleven interviews with seven primary health care providers, and five experts, an initial prototype was developed. In consultation with three working groups, to tool was further refined into a mobile application and portal to support the development and tracking of patient goal-oriented care plans. Eleven patients and five providers participated in the usability pilot in which the tool was used as part of the primary health care delivered to participating patients. The tool supported improved patient-provider interactions, and helped patients both identify and meet care goals. However, there was an identified need to further refine the design to allow for tailoring monitoring functions to meet diverse individual patient needs. A user-centred design methodology was pivotal in developing a tool that both patients and providers found to be useful in supporting the creation and tracking of patient-driven goal-oriented care plans. Further evaluation will seek to determine the impact of the tool on both patient and provider outcomes.

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New developments in the policy context of migration of health professionals from Kenya

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This research sought to understand the context of migration of health professionals in Kenya both internally and internationally and the potential of scaling up mid-level cadres in health system strengthening. This phase of the research examined the new policy developments and their impact on migration. Kenya is one of 57 countries identified by the WHO as facing a critical shortage in health professionals. A number of policy developments have influenced the context of migration. Data collection took place from August 2012 to February 2013 in Kenya. A mixed-methods approach was used including in-depth interviews and quantitative secondary data. A total of 21 in-depth interviews were conducted with key policy influencers in the health system from five main sectors: government, development partners, training institutions, health professional bodies and health institutions. Secondary data on the health system and policy context complemented the in-depth interview findings. Significant strides have been made in addressing the policy context of migration for health professionals: development of a HRH policy, an update to the Health Policy and changes in governance through a new constitution. There has been an increase in the number of accredited training institutions for health professionals. The limited data on migration of nurses shows a decrease in migration; however, no specific data exists on migration of health professionals. All stakeholders agreed that there are shortages: in some cases due to maldistribution (doctors and nurses) while in others there are sufficient numbers trained, but a lack of absorption into the health system (mid-level cadres such as clinical officers). Health professionals and policy influencers differed on approaches to mitigate the current shortages. Migration as a theme needs to be addressed proactively to ensure that the current gains are not lost. The various strides in policy development present a promising future to the management of HRH in Kenya; however, the translation of policy into practice requires time and sustained effort.

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Participatory health councils and good governance: healthy democracy in Brazil?

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PHCs are advisory bodies operating at all levels government that encourage citizen participation to monitor Brazil's health system. Despite their expansive reach, their real impact on health policies is inconclusive. We therefore aimed to examine whether PHCs offer meaningful opportunities for open participation and influence in the health policy process. We conducted a methodological triangulation of a traditional literature review between the years 2000-2013 in English and Portuguese, 38 semi-structured interviews with health council members was undertaken as well as a quantitative analysis of PHC data from the Sistema de Acompanhamento dos Conselhos de Saude (SIACS) database. Qualitative interpretive content analysis was used to analyse the interview data. We used the United Nations Economic and Social Commission for Asia and the Pacific's (UNESCAP) definition of good governance as an organizational framework for our themes that were analysed according to qualitative interpretative content analysis. We learned that PHCs fall short in many of the categories of good governance. Government manipulation of the agenda and leadership of the PHCs, delays in the implementation of PHC decision-making, a lack of training of council members on relevant technical issues, the largely narrow interests of council members, the lack of transparency and monitoring guidelines, a lack of government support and a lack of inclusiveness are a few examples that highlight why PHCs are not as effective as they could be. PHCs appear to have limited impact on the health policymaking process. In order for PHCs to fulfil their mandate, a rethinking of their governance structures, processes, membership, and oversight is required. If change is resisted, PHCs will remain largely limited to a good idea in theory but disappointing in practice.

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Patient experience with self-care support for chronic physical conditions and depression: Results of a randomized trial

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Among primary care patients with chronic physical conditions and co-morbid depression: 1) to compare patient experiences with self-care support received for their chronic condition(s) versus their depression; and 2) to assess the effect of telephone coaching for depression self-care on patient experiences of support. The sample comprised patients in a randomized trial of lay telephone coaching in a depression self-care intervention. Patients had at least one chronic physical condition and co-morbid depression (PHQ-9 score 10+ and/or use of antidepressants). At the 6-month follow-up, patients completed 2 scales from the Patient Perceived Continuity for patients who see Multiple Providers scale assessing: 1) evidence of a care plan (6 items, score range 0-6) and 2) provision of self-management information (4 items, score range 1-5). Separate scales assessed 1) care of the chronic physical condition(s) and 2) care of the depression. Scales were completed by telephone or in a paper version. The sample comprised 93 patients (69% of eligible patients who completed the 6-month follow-up). Mean age was 53.1 (s=11.2) and 85% were female. Patients had higher mean scale scores for their physical conditions vs their depression both regarding evidence of a care plan (2.5 vs 1.7, $p < 0.01$); and provision of self management information (mean 3.7 vs 3.3, $p < 0.01$). These differences persisted after adjustment for mode of administration. Overall, the coaching intervention was not significantly associated with the scale scores, either for physical conditions or depression, after adjustment for mode of administration. Among primary care patients with a chronic physical condition and comorbid depression, telephone coaching was not associated with perceptions of self-care support from health care providers. Patients report that they are more likely to receive self-management information and a care plan from their providers for chronic physical conditions than for depression.

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Psychiatric Medications Prescribed for Adolescents and Young Adults in Western Canada

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Treating young people with serious mental illness optimally involves psychosocial interventions, often in combination with prescribed medications closely supervised by a physician. This study examines trends in prevalence rates and treatment profiles for adolescents and young adults who are prescribed mood and antipsychotic medications. A seven year (2007/08 to 2013/14) prospective cohort study was conducted to examine prescription patterns for drugs associated with mood and antipsychotic disorders among individuals aged 15 to 24. This was done using Canadian Institute for Health Information's National Prescription Drug Utilization Information System (NPDUIS) data for select jurisdictions (B.C., Saskatchewan, Manitoba, and First Nation and Inuit Health Branch). Population-based rates were used to profile the demographic characteristics of the cohort. Treatment profiles, including prevalence and polypharmacy rates, were constructed for mood and antipsychotic prescription cohorts separately. There is an increase in prevalence rates for all jurisdictions. The prevalence rate is increasing among the younger ages. Prevalence rates are higher in urban areas with a trend toward increasing disparity between patients in urban versus rural areas. There are differences in the treatment profiles for mood and antipsychotic cohorts. Both cohorts have increasing prevalence rates, however, the increase for the antipsychotic cohort is entirely accounted for by those who are also dispensed mood medication. The antipsychotic cohort has a significantly higher polypharmacy rate than the mood cohort. Understanding the utilization and treatment patterns for young people who are prescribed medication to treat mental disorders is essential for the management of these disorders. The disparities found in prevalence rates, and the potentially concerning trends among patients on antipsychotic drugs provides implications for policy and requires further analyses.

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Quality Indicators for End-of-Life Care in Ontario

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As Ontario's population ages, the focus on availability and quality of end-of-life (EOL) care has increased across healthcare settings. A team of researchers conducted evidence based reviews that supported recommendations for EOL care in Ontario. The objective of this work was to develop quality indicators that map to these recommendations. We conducted a scoping review to identify research describing the development, characteristics, or descriptions of numerators and denominators, of relevant indicators. We also searched grey literature and identified indicators selected by other EOL care initiatives within Ontario. We used a modified Delphi process to conduct an online prioritization survey that asked panel members, who were mainly experts involved in the evidence based reviews, to rate each indicator based on importance, actionability, and validity using a 7-point likert scale for each criterion. The panel then convened to review the survey results (median scores) and select a final list of indicators. From a list of over 700 unique indicators, we chose 86 that met the scoping review inclusion criteria. We then shortlisted 52 of these indicators for the prioritization survey based on mapping to the recommendations, relevance to Ontario or Canada, and being adequately defined. The panel chose a proposed list of indicators after reviewing the median scores and discussions over three meetings. Throughout this process, additional indicators were suggested and selected as well. As a result of the discussions, the panel agreed upon a list of 21 indicators for further review and refinement. The final list consisted of outcome and process indicators for the recommendations related to: interprofessional, team-based care; advanced care planning; determinants of place of death; education for informal caregivers; and cardiopulmonary resuscitation. Improving EOL care has been identified as a priority for the province's healthcare system by several stakeholders, including those involved in this work. The quality indicators identified by our scoping review and expert advisory panel discussions will provide a means of measuring improvements in Ontario's approach to EOL care.

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Real-world cost effectiveness of stroke units in Ontario. A matched cohort analysis

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Compared to General Ward (GW) care, integrated Stroke Unit (SU) post-stroke care has been shown to improve health outcomes and increase healthcare costs. Whether these outcomes can been observed in real-world care in Ontario is unknown. This study examines the relative cost-effectiveness of SU care in providing post-stroke care using real-world data. A cost-effectiveness analysis (CEA) was conducted using matched Ontario administrative data and published literature. The analysis took the Ministry of Health and Long-Term Care perspective and used a discount rate of 5%. The incremental cost per quality-adjusted life year (QALY) gained was the primary outcome in the CEA. Cumulative 5-year costs were extracted directly from the matched data. Inverse probability weighting methods were applied to control for censoring. Because utility values were not available from the matched cohort, modified Ranking Scale values at discharge were mapped to utilities. The time horizon and the inception cohort were varied in sensitivity analyses. 3,743 patients receiving SU care were identified, 1,989 of which were possible to be matched to controls. Care in SUs was non-significantly more costly compared to GW care ($103,508 vs $102,835. Diff =$673[-$7,155-$8,500]). Patients receiving SU care experienced quality adjusted life year gains (1.943QALYs vs 1.814 QALYs, QALYs gained:0.129[0.033-0.224]). Probabilistic sensitivity analysis showed a 43% chance that SUs reduce costs and increase QALYs and a 88% chance that are cost-effective in a $50,000/QALY threshold. The cost-effectiveness of SUs compared to GWs was less pronounced for shorter time horizons. Subgroup analysis across cohort years indicated differences in cost-effectiveness across that SUs were less cost effective compared to GWs when using the 2010 cohort compared to when using the 2004 or the 2008 cohorts. SU care appears to be associated with life-expectancy and QALY gains compared to GW care without significant increases in costs. However, CEA outcomes were sensitive to the model's time horizon, and the year of the inception cohort, with more recent cohorts resulting in less favourable outcomes for SUs.

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Rethinking Traditional Models of Care: Mobile Primary Care in the North

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While Canada's health system has been slow to adopt the population-health approach, a number of healthcare organizations have re-oriented traditional models of care to address the unique needs of populations. This session will detail a model of primary care designed to meet the needs of rural populations in the north. In 2013, the Canadian Institute of Health Information conducted a national research study with senior healthcare leaders to study the population-health approach within healthcare planning and decision making in Canada. From this research, a set of case examples were identified in which traditional models of care were re-oriented to meet the needs of communities and improve access to care for vulnerable populations. Using a unique multimedia case study methodology in 2014, the present case study documents the NorWest Community Health Centre (CHC) in Thunder Bay, Ontario – a primary care centre that adapted its care model for a rural northern Ontario context. Thematic analysis of the results highlighted healthcare challenges in the northern context, the modified model of care, leadership and program requirements, and the health impact on populations served. Unique challenges associated with delivering care in northern Ontario included geography and economies of scale, isolation, and a growing seniors population. The modified model of care included a primary care mobile van to bring primary care and other health and wellness services to ten remote communities north of Thunder Bay. This northern CHC used a community engagement model working with local volunteers and community centres to improve access to and quality of care, and to achieve improved patient and community outcomes. Challenges associated with quantitative data, health indicators, and appropriate comparators in the northern context were identified. This case study highlights a population-health approach that was used to re-orient a traditional primary health care model to establish a needs-based program for the north. Strategies from this case study can be adapted to other challenging healthcare contexts to address health system efficiency and population-health outcomes in Canada.

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The Effect of Electronic Medical Record (EMR) Implementation on Communication Between Pharmacists and Clinicians

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The purpose of this study is to determine how EMR affects communication between pharmacists and primary care clinicians. We aim to determine how EMR affects the number and type of faxed communication requests from pharmacists. We hypothesize that after several years of using an EMR, communication patterns will have changed. To conduct this study we will perform a retrospective chart analysis comparing faxed pharmacy communications captured before and after the implementation of an EMR at a family medicine academic teaching unit in Winnipeg. The analysis will span 3 months of requests during the era of paper charting and 3 months, 3 years after implementation of a provincially approved EMR. This information will be abstracted into data collection tables. The population under study will be made up of primary care clinicians (Family Physicians and Nurse Practitioner) at the Family Medical Centre in the Department of Family Medicine and their patients' pharmacists. We expect that there will be less communication requests from pharmacists in the time period using EMR documentation, in particular relating to "clarification requests" and "incorrect dosing" notifications. There is a paucity of data in this area in primary care populations. If our hypothesis is true, then we can conclude that the use of an EMR has a positive effect on the communication between pharmacists and clinicians as shown in other areas in the health care system.

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The process of communicating policymaking and research-based evidence for children with disabilities

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The purpose of this study was to understand the processes, barriers, facilitators, and strategies for using research-based evidence in policymaking to promote participation in leisure for children with disabilities, according to different stakeholders' perspectives. In-depth key informant interviews were conducted. Critical discourse analysis was used to understand the meaning of discursive texts and broader contexts shaping these meanings. Twenty-five participants were interviewed using a purposeful sampling method. Participants included: Policymakers at the federal and provincial level in Canada, researchers from different countries and fields of health research, and stakeholders in various roles such as parents of children with disabilities and health care professionals in research or policy roles. The importance of effective communication strategies, developing long term and credible relationships, and the need to mutually educate stakeholders about policymaking and research were identified as key factors for the success of influencing policy through research. Evidence represents only a small piece on the decision-making process, and two main barriers were differences in pace between research and policymaking, and the incongruity between the types of indicators generated in research as compared to those needed in policymaking. The context shaping the discourse also included the notion that children with disabilities and leisure are two areas not seen as a priority in the policymaking arena demanding a complex approach that stakeholders are not used to integrate in their practices. Understanding the process of influencing policy through research, as well as developing relationships and organized strategies to do so, are crucial in generating research that is relevant to policymaking. Researchers in childhood disability should consider an integrated approach to knowledge-creation that includes policy considerations. Research should integrate policy-makers and families to generate knowledge and practical implications that can improve the participation of children with disabilities in Canada.

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Typologie de l'affiliation à un médecin de famille, une mesure construite à partir des banques de données administratives

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Le fait d'avoir ou non un médecin de famille influence l'utilisation des services de santé. Cette information n'est toutefois pas facilement disponible dans les banques de données médico-administratives (BDA). Notre objectif est de documenter, dans les BDA, l'affiliation des patients à un médecin de famille (MF) et ses différentes dimensions. Nous avons caractérisé l'affiliation des patients à un MF à l'aide de trois dimensions de la relation médecin-patient repérables dans les BDA : l'inscription des patients, la réalisation de certains types d'examens et la concentration des visites en clinique de première ligne auprès d'un MF, le tout sur une période de deux ans. Pour ce faire, un algorithme hiérarchique a été développé en utilisant les données sur les services médicaux RAMQ pour les années financières 2008-09 et 2009-10, concernant les patients montréalais âgés de 20 ans ou plus (n=1 248 249). L'algorithme a permis d'identifier une affiliation à un MF chez 68,1% des patients montréalais : 23,4% étaient affiliés via l'inscription (auprès d'un médecin dans un groupe de médecine de famille ou comme patients vulnérables); 21,3% via la réalisation d'un ou plusieurs examens complets majeurs (sans inscription); 12,7% à partir d'une concentration des visites de 75% ou plus auprès du même MF (sans inscription ni examen complet majeur) et 10,5% parce qu'ils avaient effectué une seule visite à un MF sur deux ans (sans inscription ni examen complet majeur). L'ajout de l'examen complet majeur à une mesure d'affiliation qui combinerait seulement inscription et concentration des visites (incluant les patients n'ayant effectué qu'une visite) permet d'identifier une affiliation à un MF chez 11,8 % de patients supplémentaires. La variable que nous avons construite constitue un «proxy» intéressant de la mesure du fait d'avoir un MF à partir des BDA. Ses différentes catégories permettront une analyse détaillée du phénomène d'affiliation, tant au regard des caractéristiques des patients, que de l'impact de différents types d'affiliation sur différents «outcomes».

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Using natural language processing for detecting adverse events from electronic health record data: A validation study

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Measuring adverse events (AEs) is necessary for quality improvements but current detection methods are inaccurate. We determined the accuracy of a potential alternative, the natural language processing (NLP) of electronic health record data, for detecting three highly prevalent AEs: a) deep vein thrombosis (DVT), b) pulmonary embolism (PE) and, c) pneumonia. A validation study was conducted at a university health network in Montreal (Canada). We randomly sampled 6,000 narrative radiology reports performed between 2008 and 2012; 2,000 from patients with a suspected DVT/PE, and 4,000 from patients having undergone a radiological examination of the lungs. We manually identified DVT, PE and pneumonia within each report, which served as our reference standard. Using a bag-of-words approach, we trained support vector machine (SVM) models predicting DVT, PE and pneumonia. SVM training and testing was performed with nested 10-fold cross-validation, and the average accuracy of each model was measured. On manual review, 324 (16.2%) reports were DVT-positive, 154 (7.7%) were PE-positive and 640 (16.0%) were pneumonia-positive. The SVM model predicting DVT achieved sensitivity of 0.80 (95%CI: 0.76-0.85), specificity of 0.98 (95%CI: 0.97-0.99) and positive predictive value (PPV) of 0.89 (95%CI: 0.85-0.93). The SVM model predicting PE achieved sensitivity of 0.79 (95%CI: 0.73-0.85), specificity of 0.99 (95%CI: 0.98-0.99), and PPV of 0.84 (95%CI: 0.75-0.92). The SVM model predicting pneumonia achieved sensitivity of 0.83 (95%CI: 0.78-0.88), specificity of 0.98 (95%CI: 0.97-0.99) and PPV of .88 (95%CI: 0.83-0.94). Statistical NLP can accurately identify AEs from narrative radiology reports. The SVM models validated in this study could assist prevention efforts by guiding the design, implementation and the evaluation of interventions aimed at minimizing their incidence.

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Vulnérabilité périnatale et retombées d'un programme de soutien à domicile : regard sur les relevailles (1/2)

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L'expérience de la naissance suscite de nombreux besoins pouvant accentuer la vulnérabilité. Les centres de ressources périnatales (CRP) dispensent un programme de soutien postnatal à domicile appelé «relevailles ». Les objectifs visent à décrire les dimensions de vulnérabilité, les besoins motivant le recours aux relevailles et leurs retombées. Recherche collaborative en trois volets s'appuyant sur l'intégration de méthodes mixtes. Les résultats ici présentés sont issus d'un volet qualitatif s'intéressant aux retombées des relevailles auprès des familles utilisatrices. Dix-sept entretiens individuels et trois entretiens de groupe auprès de parents utilisateurs de relevailles (N = 28) ont été réalisés dans trois CRP situés dans différentes régions du Québec. Un cadre de référence sur la vulnérabilité périnatale inspiré de Lessick et al. (1992) et Rogers (1997) a appuyé une analyse de contenu réalisée avec le soutien de QDA Miner. Les retombées du programme de relevailles auprès des familles se traduisent par trois grands constats : 1) les familles expriment des dimensions biologique, psychologique et sociale de vulnérabilité ; 2) les besoins motivant le recours aux relevailles relèvent principalement des composantes restauratrice (dormir), instrumentale (aide tâches/bébé et autres enfants) et d'autogestion (répit, temps pour soi); 3) les retombées de ce programme auprès des parents vont au-delà des dimensions de vulnérabilité exprimées et des besoins qui motivent le recours aux relevailles, ce qui se traduit notamment par des retombées cognitives (apprentissages). Certains enjeux liés à la disponibilité des services, la santé de la mère ou de l'enfant et la présence de fratrie, interviennent sur le façonnement de ces constats. Les résultats permettent de dégager les retombées particulières d'un programme de soutien postnatal à domicile offert par des CRP en contexte québécois. Vue sous l'angle de l'innovation sociale, ce programme de « relevailles » gagne à être mobilisé afin de maximiser le mieux-être des familles et le développement des enfants.

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CIHR-IHSPR Article of the Year

"Introduction of Surgical Safety Checklists in Ontario, Canada"

Urbach DR, Govindarajan A, Saskin R, Wilton AS, Baxter N. Introduction of Surgical Safety Checklists in Ontario, Canada. N Engl J Med. 2014 March 13; 370:1029-1038. doi: 10.1056/NEJMsa1308261

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Nancy Baxter (MD, PhD, FRCSC, FACS) is an Associate Professor in the Department of Surgery and Institute of Health Policy, Management and Evaluation at the U of T and a Senior Scientist at ICES.

CIHR-IHSPR Rising Stars

Leah Smith (PhD) is currently a **postdoctoral fellow at Queen's University**, where she continues her research on the short-, intermediate-, and long-term effects of the HPV vaccine and Ontario's Grade 8 HPV vaccination program.

Smith L, Kaufman JS, Strumpf EC, Levesque LE. **Effect of human papillomavirus (HPV) vaccination on clinical indicators of sexual behavior among adolescent girls: the Ontario Grade 8 HPV Vaccine Cohort Study**. CMAJ. 2015 Feb 3; 187(2): E74–E81. doi: 10.1503/cmaj.140900

Lianping Ti (MPH) is a **PhD candidate in the School of Population and Public Health at the University of British Columbia**. Her research focuses on the delivery and efficacy of healthcare systems for people who use illicit drugs.

Ti L, Voon P, Dobrer S, Montaner J, Wood E, Kerr T. **Denial of pain medication by health care providers predicts in-hospital illicit drug use among individuals who use illicit drugs**. Pain Res Manag. 2015 Mar-Apr; 20(2): 84–88.

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in HEALTH CARE POLICY and PRACTICE
Call for Applications

THE COMMONWEALTH FUND and Canadian Foundation for Healthcare Improvement (CFHI) invite promising mid-career professionals—government policymakers, academic researchers, clinical leaders, hospital and insurance managers, and journalists—from Canada to apply for a unique opportunity to spend up to 12 months in the United States as a Harkness/CFHI Fellow in Health Care Policy and Practice. Established by The Commonwealth Fund in 1925, the Harkness Fellowships were modeled after the Rhodes Scholarships and aim to produce the next generation of health policy leaders in participating countries.

Fellows are placed with mentors who are leading U.S. experts at organizations such as Harvard University, Stanford University, Kaiser Permanente, and the Institute for Healthcare Improvement to study issues relevant to The Commonwealth Fund's mission to support a high performing health care system—insurance coverage, access, and affordability; health care delivery system reforms (e.g., bundled payments, accountable care organizations, innovative approaches to care for high-need/high-cost patients); cost containment; and other critical issues on the health policy agenda in both the U.S. and their home countries. A peer-reviewed journal article or policy report for Health Ministers and other high-level policy audiences is the anticipated product of the fellowship. Harkness Fellows have published their findings in top-tier journals, including: *BMJ*, *Health Affairs*, and *New England Journal of Medicine*.

The Commonwealth Fund brings together the full class of fellows—from Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, and the United Kingdom—throughout the year to participate in a series of high-level policy briefings and leadership seminars with U.S. health care leaders.

Building on their fellowship experiences, Harkness Fellows have moved into senior positions within academia, government, and health care delivery organizations, making valuable contributions to health policy and practice at home and in the United States.

Each fellowship will provide up to U.S. $130,000 in support, which covers roundtrip airfare to the U.S., living allowance, project-related travel, travel to fellowship seminars, health insurance, and U.S. federal and state taxes. A family supplement (i.e., approximately $60,000 for a partner and two children up to age 18) is also provided to cover airfare, living allowance, and health insurance.

> “*Harkness Fellows as well as U.S. and international health policy experts have opened my eyes to the opportunities for us to learn from each other and to apply our knowledge to improve our own healthcare systems. My fellowship, based in Washington D.C. at the Office of the Assistant to the Secretary for Planning and Evaluation, provided me with an extraordinary opportunity to work with senior Administration officials and study bundled payments, one of the many innovative reform strategies being piloted in the United States. The experience gave me crucial insights into how the U.S. government implements and evaluates health policies, enriching my own research and thinking about knowledge translation of health system funding reforms.*”
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> **Jason Sutherland**
> *(2012-13 Harkness/CFHI Fellow)*
> *Associate Professor*
> *Centre for Health Services and Policy Research*
> *University of British Columbia*

The
COMMONWEALTH
FUND

NOVEMBER 16, 2015
Deadline for receipt of applications from Canada

VISIT
www.commonwealthfund.org/fellowships
for more details and to apply.

CONTACT
Robin Osborn, vice president and director, International Program in Health Policy and Practice Innovations, at ro@cmwf.org to inquire about the program, eligibility, and proposed projects.

The Commonwealth Fund is a private foundation, established in 1918 and based in New York, which aims to promote a high performing health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable.