

THE PRIMARY HEALTHCARE
PARTNERSHIP FORUM

prifor 2019

learning
health systems

June 27–29, 2018 • Emera Innovation Exchange, Signal Hill Campus • St. John's, NL

Program & Abstracts

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Welcome

Primary Healthcare Research Unit



On behalf of the Primary Healthcare Research Unit (PHRU), I am excited to welcome you to PriFor 2019, the eleventh annual Primary Healthcare Partnership Forum. PriFor has provided a venue for clinicians, policymakers, researchers, administrators, and others working in primary healthcare meet, showcase new programming and research, and build partnerships. We started holding these meetings to advance and promote primary healthcare in this province, nationally and internationally; they are one of PHRU's key strategies used to help us realize our vision of better health for Newfoundlanders and Labradorians.

Newfoundland and Labrador's health system is ready to learn. We have a thriving health research community, we are working on important quality improvement initiatives, we are synthesising evidence and contextualizing it for NL, and we have a solid data infrastructure. In addition, there is political will to improve our health system supporting these initiatives. What we need now is a strategy to help us capitalize on our unique efforts and maximize their impact. My hope is that bringing experts in these areas to the conference will guide our efforts to work together in helping our health system learn.

I would like to extend a special thank you to the hardworking and dedicated members of the PriFor Planning Committee and our staff at the PHRU. This meeting would not be possible without their hard work.

Welcome to all of you—those from here in the province, the country, and the rest of the world! I hope you have a productive two days with us, learn something new, and create collaborations that further your work and contribute to a more effective and efficient health system.

—Dr. Kris Aubrey-Bassler

Conference highlights

Pre-conference public engagement

We are having a special preconference public engagement event all about back pain led by Dr. Amanda Hall. This is a free event, open to all members of the public; see details on following page.

Special topics sessions

New to PriFor this year, the conference will feature special topics sessions chosen by the PriFor Planning Committee for their relevance to current health and health system issues in the province and the conference theme:

- On Thursday morning, we will feature a session dedicated to chronic pain and the use of opioid medications in the morning with talks provided by Heather Foley, Dr. Stephen Darcy, and Khadija Ibrahim. This session will be facilitated by Dr. Steve Kamper, from the University of Sydney.
- On Thursday afternoon, Dr. Kayla Collins and Donna Roche from the Newfoundland and Labrador Centre for Health Information will deliver a session on NLCHI's Data Lab and the future of data access. This session will be facilitated by Dr. Kris Aubrey.
- On Friday we'll have a session on some quality of care interventions in NL delivered by Dr. Pat Parfrey, Dr. Robert Wilson, Dr. Kris Aubrey & Oluwatosin Badejo, Dr. Krista Mahoney & Owen Parfrey, and Cheryl Etchegary. This session will be facilitated by Dr. Farah McCrate, Director of from Eastern Health and Dr. Jeremy Grimshaw from the Ottawa Research Institute.

Workshops

We invested more time this year selecting workshops for the conference that would appeal to both clinicians and researchers. We'd like to take this opportunity to bring your attention to the following workshops:

- A group of researchers from Australia (Aidan Cashin, Matthew Bagg, and Dr. Steve Kamper) will deliver a workshop on Thursday afternoon on how to engage clinicians in research.
- Dr. Gillian Bartlett from McGill University will deliver a workshop on the use of role-playing games to elicit treatment preferences from young people, their families, and healthcare providers.
- On Friday, Dr. Steve Kamper, University of Sydney and Bethan Copsey, PhD(c), University of Oxford will deliver a study design workshop.

Housekeeping

- Registration begins at 8:15 a.m. on Thursday, with opening remarks beginning at 9 a.m. Friday also starts at 9 a.m.
- Lunch on both days of the conference can be picked up in the Dining Hall at the Emera Innovation Exchange. There will be some seating available in that area but you can also take your lunch to any of the other available spaces and seating areas at the venue. Breaks will be served in Conference Hall, opposite the poster area.

Posters

- There are two full-day poster sessions; poster presenters should have their posters up on their designated board before 9 a.m. on the day of their poster session and take them down by the end of that conference day. Presenters are asked to stand by their posters during the designated poster viewing time on each conference day.

Concurrent sessions

- There are up to three rooms with oral presentations and workshops running concurrently on each day. All presenters should have received a letter indicating the room and time of their presentation. Please bring your presentation on a USB flash drive to the conference. Please see someone at the registration desk, or one of our staff members wearing a red name tag at least one hour before the block of sessions in which your presentation is scheduled.

Plenary sessions

- There are four keynote addresses, one including a panel presentation, held in the Conference Hall Main, in the morning and afternoon of each conference day.

If you need help

- Please feel free to approach any of the conference staff. They will be wearing **RED** name tags.

Preconference evening event

Wednesday, June 27

7–9 p.m.

Room: IIC-2001, Bruneau Centre for Research and Innovation

We've Got Your Back!

Amanda Hall

Low back pain is so common it affects almost everyone at some point in their lives. For some of us, it causes major problems. Researchers at Memorial University are working on this important problem. We're holding this public event to bring together practitioners, patients, caregivers, and researchers to talk about the work we've been doing.

We'll update you on the work we've done so far to answer the public's questions about low back pain and share evidence from:

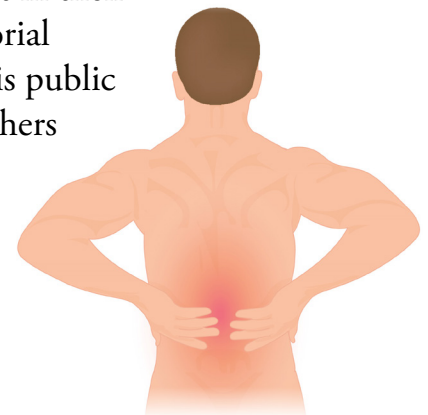
- local studies about low back pain treatment, and
- research around the world on treatments for low back pain.

We also want to hear more from the public, so we'll provide participants with the opportunity to:

- comment on the information we provide,
- ask questions from a panel of experts in low back pain treatment, and
- find out how to partner with us for future research in this area.

Registration at PriFor is not required for this free special event. We expect attendees from all backgrounds, and welcome anyone who is affected by low back pain.

Free parking for this event is available in Area 17 (directly in front of the Bruneau Centre). Light refreshments will be provided.



Plenary sessions

Thursday, June 27

9:15–10:15 a.m.

Room: Conference Hall Main

Facilitator: Kris Aubrey-Bassler

Learning Health Systems

Joshua Tepper



Dr. Joshua Tepper is a family physician and the President and Chief Executive Officer of North York General Hospital. Previously, he was the President and CEO of Health Quality Ontario (HQO), an arm's length agency of the provincial government.

Prior to HQO, Dr. Tepper was the inaugural Vice President of Education at Sunnybrook Health Sciences Centre. As Vice President, he was responsible for Sunnybrook's educational strategy and programming for learners, physicians and staff, patients and their families and the community. Prior to joining Sunnybrook, Dr. Tepper was Assistant Deputy Minister (ADM) in the Health Human Resources Strategy Division of the Ministry of Health and Long-Term Care. As the ADM he led the HealthForceOntario health human

resources strategy to ensure that Ontarians have access to the right number and mix of qualified health care providers, now and in the future.

In addition to his involvement in health policy and research at the provincial level, Dr. Tepper has also been active on a national scale as the senior medical officer for Health Canada, an adjunct scientist at the Institute for Clinical Evaluative Sciences (ICES), and a research consultant for the Canadian Institute of Health Information (CIHI). He has received several provincial and national awards for his leadership in these positions.

Dr. Tepper has always remained in active practice serving marginalized populations and taking on clinical leadership roles. He has served as the Medical Director for the Inner City Health Associates and President of the Inner City Family Health Team. He was also previously the Vice-President of the Society of Rural Physicians.

He completed Medical School at McMaster University and his residency in Family Medicine at the University of Toronto. Dr. Tepper holds a degree in Public Policy from Duke University, a Masters of Public Health from Harvard, and then completed his executive Master's of Business Administration at the Richard Ivey School of Business, where he was the Valedictorian.

Plenary sessions

Thursday, June 27

1:45–2:15 p.m.

Room: Conference Hall Main

Facilitator: Kris Aubrey-Basler

Directions for Canada's Healthcare Systems: What is Needed and What is the Role of Evidence?

Rick Glazier, Joshua Tepper, Gillian Bartlett, Susan Goold

This session will focus on what our health systems need to do differently in primary and integrated care and a discussion about what evidence is needed to support innovation including panel responses.

Plenary sessions

Friday, June 29

Room: Conference Hall Main

9:15–10:15 a.m.

Facilitator: Amanda Hall

A New Kind of Fitness: Strengthening the Social and Emotional Competence and Well-Being of Children and Adolescents Through Social and Emotional Learning

Jeremy Grimshaw



Dr Jeremy Grimshaw received a MBChB (MD equivalent) from the University of Edinburgh, UK. He trained as a family physician prior to undertaking a PhD in health services research at the University of Aberdeen. He moved to Canada in 2002. His research focuses on the evaluation of interventions to disseminate and implement evidence-based practice. Dr. Grimshaw is a Senior Scientist, Clinical Epidemiology Program, Ottawa Hospital Research Institute, a Full Professor in the Department of Medicine, University of Ottawa and a Tier 1 Canada Research Chair in Health Knowledge Transfer and Uptake. He is a Fellow of the Canadian Academy of Health Sciences and a Corresponding Fellow of the Royal College of Edinburgh. He has been awarded the CIHR Knowledge Translation award twice and is

the 2018 CIHR Barer-Flood career achievement award for Health Services and Policy Research. He has over 550 peer reviewed publications.

Plenary sessions

Friday, June 29

Room: Conference Hall Main

1:15–2:15 p.m.

Facilitator: Amanda Hall

Helping our Health System Learn: The Role of NLCAHR

Stephen Bornstein



Dr. Bornstein completed his M.A. and Ph.D. in Political Science at Harvard University. Dr. Bornstein has been the Director of the Newfoundland and Labrador Centre for Applied Health Research (NLCAHR) since the Centre's establishment in 1999. He is also Director of SafetyNet, Memorial University's centre for research on occupational health and safety. At NLCAHR, he leads the Contextualized Health Research Synthesis Program, an integrated knowledge translation program that addresses pressing health services, policy and technology questions for the provincial health system. From 1991 to 1995, Dr. Bornstein served as Assistant Deputy Minister of Intergovernmental Affairs in the Government of Ontario and as Ontario Representative to Quebec. He has a joint appointment as a

full professor in the Department of Political Science and in the Division of Community Health and Humanities of the Faculty of Medicine at Memorial University.

Conference agenda

Thursday

Thursday, June 27			
8:15–9 a.m.	Registration Atrium (B 2000)		
9–9:15a.m.	Welcome & opening remarks Dean of Medicine Conference Hall Main (B 2007)		
9:15–10:15 a.m.	Learning Health Systems Joshua Tepper Conference Hall Main (B 2007)		
10:15–11 a.m.	Research poster viewing/exhibitor viewing/refreshment break Conference Hall A (B 2007A)		
11 a.m.–noon	Chronic Pain and Opioids Conference Hall Main (B 2007)	CIHR and Primary Care: Your Opportunity to Shape Priorities Conference Hall B (B 2007A)	
noon–12:45 p.m.	Lunch Dining room (B 1013)		
12:45 p.m.–1:45 p.m.	Directions for Canada’s Healthcare Systems: What is Needed and What is the Role of Evidence? Panel discussion Conference Hall Main (B 2007)		
1:45 p.m.–2:45 p.m.	Lightning Round I: Researcher presentations Conference Hall Main (B 2007)		
2:45–3 p.m.	Refreshment break Conference Hall A (B 2007A)		
3–4:30 p.m.	Clinical research engagement workshop Conference Hall B (B 2007B)	Data lab: NLCHI Conference Hall Main (B 2007)	Treatment decision workshop B 1003

Conference agenda

Friday

Friday, June 28		
9–9:15a.m.	Announcements & recap Conference Hall Main (B 2007)	
9:15–10:15 a.m.	Audit and Feedback for Quality Improvement Jeremy Grimshaw Conference Hall Main (B 2007)	
10:15–11 a.m.	Research poster viewing/exhibitor viewing/refreshment break Conference Hall A (B 2007A)	
11 a.m.–12:30 p.m.	Impact of Interventions to Improve Quality of Care in NL Conference Hall Main (B 2007)	Study design workshop Conference Hall B (B 2007B)
12:30–1:15 p.m.	Lunch Dining room (B 1013)	
1:15–2:15 p.m.	Helping our Health System Learn: The Role of NLCAHR Conference Hall Main (B 2007)	
2:15–3:15 p.m.	Lightning Round II: Student research presentations Conference Hall Main (B 2007)	
3:15–3:30 p.m.	Refreshment break Conference Hall A (B 2007A)	
3:30 p.m.	Conference adjourns	

Lightning rounds

Thursday

Room:
Conference Hall Main

Facilitator:
Russell Dawe

Monitor:
Oliver Hurley

Lightning Round I: Researcher presentations

1:45 PM	Right Here, Right Now Drop-In Counselling: A Program Evaluation Using a Logic Model	Catherine de Boer
2:00 PM	Anthony's Game: When Treatment Options Conflict with Young People's Preferences	Gillian Bartlett
2:15 PM	Enhancing Primary Healthcare Services on the Connaigre Peninsula by using Telehealth for Surgical Pre-Admission Clinic	Gina Sheppard
2:30 PM	What are the attitudes and beliefs about the causes and management of low back pain among the general public? Preliminary results	Danielle Coombs

Lightning rounds

Friday

Room:
Conference Hall Main

Facilitator:
Russell Dawe

Monitor:
Samantha Inwood

Lightning Round II: Student presentations

1:45 PM	Identifying Missed Appointment Statistics for Government Assisted Refugees to Improve Access to Care	Andrew Dunsmore
2:00 PM	What is important to osteoarthritis patients when choosing between medications?: Results of a discrete choice experiment	Bethan Copsey
2:15 PM	Interventions to Improve Primary Healthcare in Rural Settings: A Scoping Review	Brad Furlong
2:30 PM	Sydney Health Partners Emergency Department (SHaPED) trial: Implementation of a low back pain model of care in emergency departments	Danielle Coombs

Poster presentations

Thursday

Room:
Conference Hall A (B 2007A)
Monitors:
Harith Al-Obaidi, Mark Howells, Brad Furlong

1	A Preliminary Investigation into the Potential Exposure of Mothers to Violations of the WHO International Code of Marketing of Breast-Milk Substitutes in Eastern NL	Susan Barry
2	Exploring Factors Related to Infant Feeding in Women Intending to Exclusively Breastfeed in Newfoundland and Labrador, Canada	Hannah Buckle
3	Impact of Midwifery on Infant Feeding Outcomes in Newfoundland and Labrador	Rosemary Stanoev
4	Parental Patterns and Perceptions of Cannabis Use During Pregnancy and Breastfeeding in St. John's, Newfoundland	Sarah Manning
5	Sugar babies; Best Practices to help Diabetic Mothers achieve exclusive breastfeeding	Amelia Lacey
6	Investing in healthy babies and healthy mothers: a patient oriented approach	Alicia Taylor
7	Family Medicine Obstetrics in Residency: Program Evaluation	Russell Dawe
8	Skin to Skin care after Cesarean Section; What's the big deal?	Anna Corbett
9	Perspectives of the health providers, residents and families on a deprescribing intervention in long-term care	Cathy Balsom
10	Medication Use After Laparoscopic Sleeve Gastrectomy: Results from the NL Bariatric Surgery Cohort Study	Malcolm Snow
11	The Opioids Crisis in Newfoundland and Labrador: A qualitative study exploring the family physician perspective	Matthew Downer
12	The Substance of Social Work: Critically Interrogating the 'Place' of Substance Use Education in Canadian Social Work Curriculum	Christopher Smith
13	Assessing barriers to adopting Choosing Wisely guidelines for pre-operative testing	Samantha Inwood

Poster presentations

Thursday

Room:

Conference Hall A (B 2007A)

Monitors:

Harith Al-Obaidi, Mark Howells, Brad Furlong

14	Screening for Poverty And Related social determinants and intervening to improve Knowledge of and links to resources (SPARK) Study	Kris Aubrey-Bassler
15	The Forest Road Clinic for Adults with Developmental Disabilities: A Logic Model	Katherine Stringer
16	Advanced Foot Care Nurses Perceptions of Barriers and Facilitators to Foot Care: A Pan-Canadian Study	Jennifer Densmore
17	"I guess this is how it goes": Implications of Patient and Provider Knowledge and Attitudes for Vulvodynia Treatment in NL	Krisztina Bajzak
18	'Recreational' consumer genomics: lessons from Australia for Canadian primary care	Brenda Wilson
19	Prevalence and Factors Associated with Pre-treatment Insomnia Symptoms in Women with Early Stage Breast Cancer	Kaitlyn Mahon
20	Pre-emptive nature of special education	Sharon Penney
21	Medicalising the Modern Death: Exploring Changing Perceptions of Death and Dying in a Rural Newfoundland Community	Timothy Collier
22	Bath-related deaths and common contributory factors: a systematic review	Anh Thu Thi Vo
23	Exploring the Barriers and Facilitators of Following a Meal Plan for Type 2 Diabetes: A Survey Using the Theoretical Domains Framework	Taylor Wilson
24	Trajectory of Cognitive Functions in Elderly Canadians	Yifu Liao
25	How to determine the study designs used in the articles included in your scoping review	Mark Howell
26	What is the Theoretical Domains Framework (TDF)?	Rebecca Lawrence

Poster presentations

Friday

Room:
Conference Hall A (B 2007A)
Monitors:
Harith Al-Obaidi, Mark Howells, Brad Furlong

2	Determinants Of Potentially Preventable Emergency Department Visits Made By Patients From The St. John's Metro Area, With A Focus On Family Physician Work Hours	Jerome Siromani
3	Drop the Pre-op: Reducing testing prior to low risk surgical procedures in Newfoundland and Labrador	Krista Mahoney
4	If you want to go fast, go alone. If you want to go far, go with others: Evaluating patient oriented research	Holly Etchegary
5	The New Refugee Health Clinic - A Logic Model	Petra Joller
6	When TSTs and IGRAs Don't Add Up: Treating Latent TB at the MUN Refugee Health Clinic	Francoise Guigne
7	Feeling at home: social connectedness of newcomer immigrants and refugees in Newfoundland.	Grace Akese
8	Her Health: Sharing Health Information with Newcomer Women in our Community	Sarah Devereaux
9	Evaluation of the Family Practice Renewal Program	Melissa LeDrew
10	Evaluation of the Newfoundland and Labrador Prescription Monitoring Program	Melody Sorenson
11	Other End of the Leash: the Lived Experiences of St. John Ambulance Therapy Dog Program Volunteers in St. John's, Newfoundland	Julie Carberry
12	Paramedics Providing Palliative Care - A Pilot Program	Megan Carey
13	Elements of a Robust Rural Family Practice: Resilience & Generalism Examined – Pilot Study	Andrew O'Dea

Poster presentations

Friday

Room:

Conference Hall A (B 2007A)

Monitors:

Harith Al-Obaidi, Mark Howells, Brad Furlong

14	NP E-Mentorship: Does it Ease the Transition to Clinical Practice?	Valda Duke
15	The Influence of Clinic Funding on the Integration of Registered Nurses in Primary Care: A Qualitative Study from Newfoundland and Labrador	Julia Lukewich
16	Identifying Competencies for Registered Nurses in Primary Care: A National Delphi Study	Julia Lukewich
17	Factors that Influence Registered Nurses' Professional Identity: Changes from Year 4 Student to Novice RN	Karen Street
18	Evaluation of Changes to Mental Health and Wellness Services on the Burin Peninsula	Janelle Hippe
19	Engaging Newfoundland and Labrador in Designing an Integrated Perinatal Mental Health System of Care	Martha Traverso-Yepez
20	Infant Mental Health and its Promotion: Understanding the Training Needs of Public Health Nurses in St. John's, NL	Emily Noorton
21	Psychological Distress Scale Trajectory of Young Adults between 18-45 in Canada	Zhuoru li
22	Patient travel for medical appointments within Newfoundland and Labrador	Tracy Parsons
23	Shared Medical Appointments for Patients with Well-Controlled Diabetes in Sheshatshiu	Emily Philpott
25	Environmental contaminants in Newfoundland and Labrador: a population-based study to explore any association with relevant cancers.	Arifur Rahman
26	Increasing Social Capital through a Rural Research Capacity Building Program	Thomas Heeley

Abstracts

Lightning Round Presentations

Anthony's Game: When Treatment Options Conflict with Young People's Preferences

Gillian Bartlett

Context: The key notion of shared-decision making in primary care often omits the perspective of children and adolescents. This is particularly true when assessing health related-quality of life (HRQoL) priorities which may be significantly different for younger patients. We have developed a role-playing-game to collect HRQoL preferences associated with treatment decisions in young people. The game is intended to provide information to patients, families and health care professionals on treatment preferences in situations where patient preferences may conflict with social norms (i.e. prefer the treatment that is not visible to class mates over the most effective treatment).

Objective: To finalize the game design and assess user experience insights. **Design/Population:** Design sprint using ethnographic participant observation and qualitative descriptive analysis. **Setting:** Convenience sample of healthy adults and adolescents in Montreal, Canada. **Methods:** During a 3-hour period, participants were informed of the purpose of the role-playing game and are asked to play 2-3 rounds of different versions of the game. "Players" were divided into groups, and the game master ran the groups through the game. After the game play (approximately 1 hour for several rounds), a group discussion captured feedback and explored the players' experience and reaction to the elements of the game (avatar style, vocabulary, tone of voice, etc) from their individual perspectives. **Results:** 4 adolescents, 4 adults and 3 members of the research team participated in game play. All participants felt they were making a meaningful contribution for adolescents or children with the health condition presented in the game. The game provided a strong sense of education (i.e. "I had no idea this was the process"). The wording for the treatment options needs to be better explained and jargon minimized. Players were able to take on roles and change their decisions based on "Avatar" characteristics. Power dynamics dominated with adults minimizing the role of adolescents. **Conclusions:** The game allowed for the collection of patient preferences in mentally "safe" space and has the potential to educate people and health care professionals on preferences for treatment options as well decision-making process. The power dynamics imply that the game will need to be played in stratified groups during the data collection phase. This has implications for primary care providers.

Enhancing Primary Healthcare Services on the Connaigre Peninsula by using Telehealth for Surgical Pre-Admission Clinic

Gina Sheppard

Context: Using a Primary Health Care Collaborative approach, there has been considerable effort on the Connaigre Peninsula to build effective primary health care teams to support patient- and family-centred care. Community members have brought forward issues surrounding transportation and accessing services outside the geographical area. One of the concerns highlighted was accessing surgical services and the need to make two trips to Grand-Fall Windsor (GFW) in a relatively short timeframe - one for the pre-admission clinic (PAC) and another for the actual procedure. A return trip to GFW has significant time and cost implications to patients living in the region. **Objectives:** This project focused on utilizing Telehealth to deliver a pre-admission clinic on the Connaigre Peninsula. **Design:** Experience-Based Co-Design (EBCD). **Setting:** The Telehealth PAC is delivered in a community-based clinic in St. Alban's. **Population studied:** Patients residing on the Connaigre Peninsula scheduled for a pre-admission clinic with General Surgery in Grand-Falls Windsor. **Intervention:** Client access to PAC by Telehealth is initiated

when the booking clerk at the referral centre in GFW screens PAC booking forms for patient's community of residence. If the patient is from one of the communities serviced in St. Alban's clinic, the patient is contacted and advised their PAC appointment will take place at the St. Alban's clinic. The booking clerk coordinates the time and date of the appointment with the clerk at the St. Alban's clinic prior to notifying patient. During the actual appointment, the patient registers at the St. Alban's clinic and is set up with a Telehealth linkage. The PAC nurse is connected via Telehealth and the patient is accompanied and supported by clinic staff - LPN or NP depending on availability. Local clinic staff provide clinical support by monitoring vital signs, completing EKG when necessary, providing educational documents and requisitions as necessary. The PAC nurse facilitates the assessment and both the local team and the PAC nurse document on a shared medical record. The appointment is carried out in the same way as a face to face PAC, but without the travel, financial and time demands for the patient. Outcomes: The primary outcome of this initiative is to improve Primary Health Care access to care for patients living on the Connaigre peninsula by reducing the need to travel to GFW to access care. Secondary outcomes include improved patient satisfaction, improved collaboration and provider satisfaction. Results: To date, 3 patients have successfully completed the pre-admission clinic at the St. Alban's site. Conclusion: With it's success on the Connaigre Peninsula, the Telehealth PAC proof of concept could be replicated within Central Health and across the Province. The St. Alban's PHC Collaborative Team utilized an approach to change that was effective in engaging community and health partners in quality improvement. Ongoing facilitation and implementation of this experience based co-design approach in any community will impact the ongoing goal to improve primary health care across the province.

Identifying Missed Appointment Statistics for Government Assisted Refugees to Improve Access to Care

Andrew Dunsmore

Context – In 2015, Eastern Health's missed appointment rate of 11% represented 176,00 missed appointments. Family physicians estimate that Government Assisted Refugees (GARs) miss appointments as often as 25% of the time, but Eastern Health has not reported rates for this sub-population. Confirming this estimate will help justify further study of this inefficiency and the eventual implementation of programs and policy to address it. Objective – To determine if there is a difference in missed appointment rates between GAR and non-GAR populations. Design – Retrospective chart review Setting – Memorial University family medicine clinic Population Studied – The primary population is GAR patients with appointments scheduled between June 1, 2017 and May 31, 2018. A random sample of non-GAR patients matched for sex and age at a 10:1 ratio will be used to compare missed appointment data. Outcomes – Our primary outcome is the overall missed appointment rate, but we will also separately examine miss-rates for family medicine, specialist and booked investigation appointments as secondary outcomes. Results – Research is ongoing. We expect to have preliminary results to present at the time of the conference. We expect to confirm a higher missed appointment rate for GARs vs non-GARs. Conclusions – If our hypothesis is confirmed, we will pursue further research to understand this issue and to inform the development of policy and programs to address it.

Interventions to Improve Primary Healthcare in Rural Settings: A Scoping Review

Brad Furlong, Carla Penney

Background: Primary care aims to provide patient and family-centered care that is accessible, effective, safe and population-health oriented. Unfortunately, individuals living in rural and remote areas often have poorer health status, demonstrate less healthy behaviours, and have overall higher mortality rates than those living in larger urban centres. These disparities in health outcomes indicate a great need for primary care in these areas. We aim

to synthesize information from studies that have evaluated interventions to improve primary care in rural settings. Methods: Three databases were searched from 1996 to 2019 using key terms relating to rural health, primary care and healthcare delivery. Study characteristics and information on interventions, outcomes and findings were extracted for all eligible studies and included in a descriptive synthesis. Results: A total of 3,457 articles were identified of which 223 met eligibility criteria. 42% of the studies were undertaken in the United States, 20% in Australia and 11% in Canada. 62 articles assessed outcomes regarding primary care access most commonly assessing recruitment and retention of family physicians and access to services. 142 articles assessed outcomes regarding primary care quality focusing on desired health outcomes for patients and adherence to evidence-based standards of care. Lastly, 19 articles assessed outcomes regarding the primary care cost/efficiency such as healthcare utilisation. Conclusion: We propose to discuss the results of our scoping review including a detailed synthesis of the interventions, outcome measures and findings from the studies in each of the 3 outcome categories of primary care access, quality and cost/efficiency.

Right Here, Right Now Drop-In Counselling: A Program Evaluation Using a Logic Model

Catherine de Boer

Context: In 2015, with funds awarded from Memorial's Office of Public Engagement, the School of Social Work partnered with the St. John's Status of Women Council/Women's Center (SJSWC/WC) in the design, implementation, and evaluation of a single-session counselling program called Right Here, Right Now Drop-In Counselling (RHRN). Using a distinctive model, combining feminist and narrative therapies with trauma-informed practice, RHRN is the only single session program in Canada, which serves women exclusively and is delivered by a non-profit community-based organization. The service is of relevance to family practice/primary care in that it helps to address the mental health needs of women in St. John's and the surrounding area by offering free, accessible single-session counselling services. Objective: To identify the short-term outcomes of the RHRN Drop-In Counselling program and to determine if and to what extent the program achieved the intended results. Design: The program evaluation used a logic model design. Data collection included quantitative and qualitative data linked to each of the eleven short-term outcomes listed in the logic model. Quantitative data collection tools included intake forms, session notes, and end of session and post service feedback forms. Qualitative tools included pre and post interviews with each member of the counselling team and post service interviews with service recipients. Setting or Dataset: The Women's Center at the St. John's Status of Women Council, a non-profit community based agency. Population Studied: The unit of study was the six-month pilot of the RHRN Drop-In Counselling Program. To determine if the program was achieving its intended outcomes, data was collected from members of the counselling team (n=6); and service participants (n=78). Intervention/Program: The essential features of the RHRN Drop-In Counselling Program were: • Engagement - engaging women in need of mental health services; • Service Delivery - providing single-session counselling; and • Training – increasing the skill and knowledge base of the counselling team and providing training opportunities for social work students. Outcomes: During the 6-month pilot, 78 women received single session counselling and 9 received crisis counselling. Sixty-four percent of the women had never accessed services at the Women's Center before with 50% of those maintaining engagement with other programs at the Women's Center following their single-session counselling experience. Thirty-two percent of the women utilized the service as a stopgap measure while on wait lists for "traditional" mental health services. Four formal training sessions were provided to the counselling team in addition to weekly informal trainings. Three social work students were engaged in the project. Results: Eighty-eight percent of the participants completed the ten-item End of Session Evaluation Form. Using a 4-point scale with 4 being "excellent" and 1 being "poor", mean scores ranged from 3.58 - 3.99. Seventy-seven percent of the sessions were identified as being helpful as per the qualitative

comments on the form. In the Post-Service Interviews participants were asked to rate their experiences using a 10-point scale with 10 being “the service was extremely useful and met or exceeded expectations” and 1 being “the service was completely useless”. The mean score was 9.3. Themes that emerged from the qualitative data suggest that aspects of therapy participants found most useful were: learning new skills, gaining insights, having someone to talk to, having someone who listened and cared and the co-development of a plan. Conclusions: The pilot of RHRN was a success. There was considerable service uptake that remained constant throughout the six months. Women who utilized the service found it useful, many of whom returned for repeat sessions or to engage in other services offered by the Women’s Center. Members of the counselling team were invigorated by their involvement in the service and in their increased capacity to be useful to women with mental health concerns. The drop-in counselling program provided a necessary stopgap for women waiting more traditional mental health services within the Region. The emphasis placed on training, reflective practice and peer support enabled the drop-in counselling program to remain useful and responsive to mental health needs in the community.

Sydney Health Partners Emergency Department (SHaPED) trial: Implementation of a low back pain model of care in emergency departments

Danielle Coombs

Background: When low back pain is managed in emergency departments (ED), overdiagnosis and overtreatment are common. For instance, at three emergency departments in Sydney, Australia in 2017, 28% of low back pain patients had lumbar imaging, 74% received opioids and 16% were admitted to hospital. These practices are discordant with current guidelines. Objective: To evaluate the implementation of an evidence-based model of care for acute low back pain in emergency departments. Design: Stepped-wedge cluster randomized controlled trial. Participants: The primary participants are the ED clinicians from the participating sites. These include Doctors, Nurse and Physiotherapists. Secondary participants are a sample of adult patients who receive care for their non-serious low back pain at the participating sites. Intervention: We implemented the model of care at four emergency departments in New South Wales, Australia. After a 52-week retrospective baseline control period, a multifaceted intervention was randomly and sequentially rolled out every 4 weeks at each emergency department. All sites were followed for another 12 weeks. The multifaceted intervention included educational seminars, access to printed and electronic educational resources, supplying EDs with heat wraps for pain relief, offering referral to follow-up services such as back clinic or Physiotherapy and monthly feedback on key outcomes. Information on treatment provided was harvested from the electronic medical records, patient-reported outcomes were collected via an online survey at 1, 2 and 4 weeks after discharge. The primary outcomes are based on health service delivery: the proportion of patients receiving lumbar imaging, opioids and admitted to hospital. Secondary outcomes are a sample of patient reported outcome measures including pain, disability, quality of life and satisfaction with emergency care. We collected health care delivery data for the 4025 low back pain presentations during the trial period. 276 emergency clinicians received the intervention and 414 patients volunteered to participate in patient reported outcome surveys. An economic evaluation will be undertaken from the health system perspective. The SHaPED trial received ethical approval from the RPAH HREC (reference: X17-0043). The trial is registered with the Australia New Zealand Clinical Trials Registry: ACTRN 12617001160325. Conclusion: The conference presentation will discuss the rationale, methods and intervention for the trial. We hypothesize that active implementation of an evidence-based model of care for low back pain will improve emergency care by reducing inappropriate overuse of tests and treatments (i.e. imaging, opioids, admission to hospital), improving patient outcomes and thus reduce health care costs.

What are the attitudes and beliefs about the causes and management of low back pain among the general public? Preliminary results

Danielle Coombs, Steve Kamper, Andrea Pike, Brad Furlong, Rebecca Lawrence, Mark Hancock, Hazel Jenkins, Ananda Hall

Context: Choosing Wisely Canada (CWC) is a national campaign to identify and reduce low value care. Choosing Wisely Newfoundland and Labrador (CWNL) has adopted the CWC recommendation to reduce unnecessary imaging for low back pain. It is evident from interviews and focus groups with physicians that a major reason to order an image (x-ray or CT scan) for back pain is to satisfy or reassure the patient rather than to help with a diagnosis. Aim: This study aims to understand the public's beliefs about back pain and imaging. Design: A cross-sectional population-based survey Tool: The validated back beliefs questionnaire was adapted to include four additional questions relating to beliefs about imaging and physical activity. Procedure: a representative sample of 3000 adult residents in Newfoundland and Labrador were mailed the survey in July to August 2018 and responses were collected until September 30th, 2018. Results: 425 surveys were returned and data is currently being analysed. Demographic data and factors that influence beliefs about imaging will be presented at the conference.

What is important to osteoarthritis patients when choosing between medications?: Results of a discrete choice experiment

Bethan Copsey

Context: Discrete choice experiments can be used to quantify patients' relative preferences for treatment benefit and risks. Objective: This study aimed to identify important factors in medication choice for people living with osteoarthritis. Design: Discrete choice experiment Population studied: 300 residents of the United Kingdom with hip and/or knee osteoarthritis Intervention/Program: A web-based survey of 16 choice tasks, where they selected their preferred option from 2 medications. Outcomes: Medications were described in terms of the effect on pain, stiffness, and function, duration of treatment effect, and risk of heart attack and stomach ulcer bleeding. Choice data was analysed using mixed effects logistic regression. Results: Pain, function, duration of treatment effect and risk of serious adverse events influenced medication preferences, whereas stiffness did not. A reduction from 'severe' to 'none' was equivalent to a decrease in risk of heart attack by 3.1% for pain, 2.1% for function and 0.7% for stiffness. Increasing duration of treatment effect from 1 to 12 months was equivalent to decreasing the risk of heart attack by 2.6%. Subgroup analysis suggested disease severity influenced patient preferences. Conclusion: Pain severity and duration of treatment effect should be primarily considered alongside the patient's disease severity, in benefit-risk assessments when choosing between medications for osteoarthritis patients.

Posters

"I guess this is how it goes": Implications of Patient and Provider Knowledge and Attitudes for Vulvodynia Treatment in NL

Krisztina Bajzak

Context: Vulvodynia is a complex chronic pain condition characterized by vulvar pain of at least 3 months duration without a clear identifiable cause. Up to 1 in 4 people with vulvas will be affected in their lifetime, with significant detrimental impacts on their quality of life and overall health. 40% of those presenting for assessment will never receive a diagnosis or access to treatment. General Practitioners (GPs) and other frontline healthcare providers (HCPs) can play a crucial role in identifying potential cases and making referrals to specialists who can make a diagnosis and coordinate treatment. Objective: The objective of our study was to understand the diagnosis and

treatment process from the perspective of patients in Newfoundland, in order to improve diagnosis rates, treatment outcomes, and patient experience. Design: Qualitative case study: interviews and focus groups using a semi-structured open-ended question guide, plus the collection of demographic information and patient histories. Setting or Dataset: Affected individuals identified through patient records of a gynecology clinic. Population studied: Three focus groups totaling 10 people and one individual interview for a total of 11 individuals. Inclusion criteria: patients diagnosed with provoked vestibulodynia, a sub-type of vulvodynia, and for whom this is a primary complaint. Exclusion criteria: patients with concomitant complex pelvic pain conditions Outcomes: A follow-up project with GPs and other HCPs, which will contribute to best practices to better serve people living with vulvodynia, was informed by this research and is in progress. Results: Impediments to vulvodynia diagnosis and treatment occur in three phases: 1) Pre-symptom onset: patient and HCP beliefs and attitudes about sex and sexuality can normalize sexual pain and inhibit clear and respectful discussion of sexual health; 2) Symptomatic, pre-diagnosis: HCP knowledge and attitudes, in combination with an unsupportive health infrastructure, can delay diagnosis and cause emotional distress for patients; 3) Post-diagnosis: diagnosis can provide validation and hope, but effective treatment is difficult to access. Lack of healthcare resources can be perceived by patients as a lack of HCP care. Conclusion: Patients with vulvodynia experience a multitude of barriers to managing the negative impacts of the condition at the levels of pre-diagnosis, diagnosis, and treatment. HCPs can enact some simple practices to improve vulvodynia diagnoses and outcomes, such as asking questions about sexual wellness without waiting for patient prompting, e.g. inquiring about penetrative pain as a screening question during gynecologic office encounters or annual routine visits, or providing health promotion materials about pelvic pain in clinic waiting areas and restrooms. Other barriers that merit further evaluation for effective interventions are a lack of continuity in healthcare services; limited access to specialists, physiotherapists, and psychologists; as well as sexual health education strategies for patients and partners.

A Preliminary Investigation into the Potential Exposure of Mothers to Violations of the WHO International Code of Marketing of Breast-Milk Substitutes in Eastern NL

Susan Barry

Context: The WHO International Code of Marketing of Breast-milk Substitutes (WHO Code) was developed to affect change against open marketing of Breast-milk Substitutes. Global studies have associated women who recall infant formula marketing and incentives with an increased likelihood of formula feeding. However, it is currently unclear if marketing of infant formula (IF), which violates the WHO Code, is prevalent in NL. As exclusive breastfeeding is the recommended practice for at least the first six months of life, obtaining data that explore the prevalence of this marketing will provide direction for primary care practitioners to best inform and support new mothers in NL. Objective: To determine the potential exposure of mothers to violations of the WHO Code in NL. Design: Retrospective cross-sectional study of 123 mothers. Data were collected using an online survey and analyzed using frequency, chi-square analysis, and independent sample t-tests. Setting: Population based setting in the Eastern Health region of NL. Population Studied: Inclusion criteria included mothers who were above the age of 19, a resident of the Eastern Health region of NL and have at least one child under the age of two years who was delivered as a single, full term (39+ weeks) infant. Exclusion criteria included fathers or other guardians, mothers who delivered a multiple birth (twins, triplets, etc.) and mothers who delivered a pre-term infant under 39 weeks. n=123. Outcomes: 84.6% of mothers with infants under the age of two were exposed to at least one WHO Code violation, 95% CI_{exposed} = (0.782, 0.910). Results: The most frequent WHO Code violations were: i) receiving coupons or discount codes (85.2%), ii) receiving free samples (79.8%), iii) being contacted by an IF company (71.3%). There were no statistically significant associations detected between socio-demographics investigated and exposure at $\alpha=0.05$. 100% (n=91) of those who received free samples of IF or BMS received them from IF companies. The

most common type of facility in which branding of IF or BMS products were viewed was a doctor's office (19.3%). Conclusion: The vast majority of mothers have been exposed to at least one WHO Code violation. Violations are occurring within health care facilities and from health professionals. These findings support the need for monitoring and enforcement of the WHO Code to support and enable mothers to make informed infant feeding choices.

Advanced Foot Care Nurses Perceptions of Barriers and Facilitators to Foot Care: A Pan-Canadian Study

Jennifer Densmore

Preventative foot care is important to avert devastating complications in high risk populations, such as those with chronic diseases. Unfortunately, many people have difficulty accessing foot care services. Currently there is limited knowledge regarding the barriers and facilitators to foot care in Canada. To address this gap, we conducted a descriptive exploratory study that surveyed advanced foot care nurses (AFCNs) who are members of the Canadian Association of Foot Care Nurses (CAFCN). Advanced nursing foot care practice is a growing specialty and the CAFCN has over 400 members who delivering their services in various settings across Canada. AFCNs are in a unique position to understand the barriers and facilitators to foot care. The purpose of this poster presentation is to present findings of a pan-Canadian descriptive exploratory study that explored AFCNs' perceptions of barriers and facilitators to foot care for Canadians (N =150). Results showed that AFCNs perceive that Canadians experience multiple barriers to foot care such as: a lack of understanding regarding the importance of foot care; poor personal practices; inappropriate footwear; mobility and vision issues; neuropathy; embarrassment; and cost. Several facilitators to foot care were also reported by AFCNs such as: patient education; referrals from healthcare providers; regular assessment by healthcare providers; medical insurance coverage; and positive client attitudes towards footcare. Results of this study provide direction for the development of foot care policies and programs that address barriers and facilitate access to preventative foot care services for Canadians.

Assessing barriers to adopting Choosing Wisely guidelines for pre-operative testing

Samantha Inwood

Context: Despite the underutilization of pre-operative tests (i.e. chest x-ray, ECG, INR, creatinine, and hemoglobin) for healthy patients undergoing low-risk surgery, as well as recommendations and guidelines from the Canadian Medical Association and Choosing Wisely Canada, provincial data shows that these tests are still being conducted on these patients. Disseminating guidelines does not appear to be enough to change clinical behaviours. Objective: This study aims to identify healthcare providers' (HCP's) perceptions on testing, as well as barriers and facilitators to reducing unnecessary pre-operative tests. Design: This is a qualitative study using semi-structured interviews and a purposeful snowballing sampling strategy. Participants: To date, participants consist of 16 HCP (anesthesiologists, surgeons and pre-admission clinic nurses) across Newfoundland that order pre-operative tests for patients. Intervention/Instrument: Interview questions were created using the Theoretical Domains Framework (TDF), a validated framework to help identify influences on HCP's behaviours. Outcome Measures: The TDF will provide a framework to conduct a deductive analysis of the transcribed interviews, coding data into relevant TDF domains. Inductive analysis will generate overarching themes within each observed domain. Results: The data is currently being coded and analyzed. To date, 16 interviews have been conducted and will continue until saturation. Conclusion: These results will help to inform a potential intervention to improve guideline adherence in HCPs caring for healthy patients undergoing low-risk surgery. The implications of adhering to these guidelines include reducing wait times for tests, harmful exposures, costs and workload for HCP.

Bath-related deaths and common contributory factors: a systematic review

Anh Thu Thi Vo (Theresa)

Context: The bathing style of soaking in the bathtub filled with hot water is one of the favorite kinds of relaxation over the world, but bath-related deaths have not been well-known by the public. **Objectives:** The study aimed to assess the impacts of cardiovascular diseases, and comorbid factors on the demises in the bathtub which would be able to develop preventive strategies. **Design and dataset:** A systematic review. We conducted a systematic search through four electronic databases EMBASE, PUBMED, CINAHL, GOOGLE SCHOLAR for studies published in English from 1999 to 2019. **Population studied:** We included primary studies of deaths in the bathtub occurring in adults aged 18 or older and obtaining variables related to our study questions. We used the Newcastle-Ottawa Quality Assessment Scale to assess the risk of bias for the included studies. **Outcomes:** N/A **Results:** Of the 199 studies identified in the initial search, 12 observational studies met the inclusion criteria from six countries: Canada, USA, Germany, Australia, Japan, and Korea. Bath-related deaths commonly occurred in older individuals aged over 50. A mortality rate in men was higher than that in women aged over 60, but there were variances between studies. Up to 50% of bath-related deaths occurred in victims living alone. Alcohol intake was a probable contributory cause of fatalities in the bathtub. Bath-related deaths in the winter were 4.6 times higher than those in the summer. Heart diseases were the most contributory factor. The deaths in the tub tended to increase in victims with 1) ischemic heart diseases; 2) congestive heart failure, acute myocardial infarction; 3) coronary artery stenosis, cardiomegaly; and 4) hypertension. **Conclusions:** Bath-related death frequently occurred in winter in older people, particularly in those who live alone, those with pre-existing cardiovascular disorders or consuming alcohol before bathing. We recommended some preventive strategies such as raising public awareness about potential hazards while bathing and increasing the attention of family members or personal support workers to these vulnerable individuals during their bathing

Determinants Of Potentially Preventable Emergency Department Visits Made By Patients From The St. John's Metro Area, With A Focus On Family Physician Work Hours

Jerome Siromani

Context: Wait times in Canadian Emergency Departments are among the highest in the industrialized world. And, notably, approximately half of the patients who presented at Canadian Emergency Departments between 2010 and 2011 were (a) classified as low-acuity and (b) not admitted for further care. This problem exists across Newfoundland & Labrador, too. A study to try and ascertain if more after-hours work by Family Physicians in the St. John's Metropolitan Area helps to reduce the volume of low-acuity Emergency Department visits by patients in the same area will benefit the relevant stakeholders (esp. the government); and, this study would potentially lead to more access (especially after-hours access) to primary care/Family Physician clinics being provided while reducing the burden on Emergency Departments (all with respect to St. John's). **Objective:** To describe, within the fiscal year 2011-2014 time-frame, the effects of St. John's Family Physician (FP) after-hours care on low-acuity Emergency Department (ED) visits that were made by adult residents of St. John's, while controlling for non-modifiable patient characteristics, such as - age, gender, socio-economic factors, co-morbidities, and continuity of care. A secondary objective is to see if the relationship between FP after-hours care and low-acuity ED patient visits varies according to day of week and month of year. **Study Design:** Retrospective Cross-sectional Observational Study using previously collected administrative data. **Datasets:** Three existing datasets from NLCHI (i.e. MCP Beneficiary file, MCP Physician Claims file, and PDAD/CDMS file) are being used, along with the ED Records file from Eastern Health, the Academic Physician Electronic Patient Records file from Memorial University's Discipline of Family Medicine, and the freely-available 2016 Census Data file for all respective Census Dissemination Areas across the St. John's Metro area. **Study Population:** All adult (18+) individuals who were resident in St. John's throughout the 4-year

study period were included, as long as each of them could be assigned to a “usual provider of care” for the same period (i.e. as long as the majority of visits made to Family Physicians by the respective individual could be shown to have been made to one particular FP). Note - an FP could only be linked to a study subject if the FP had at least 500 total patient visits during the study period and had patient visits during at least 3 out of the 4 fiscal years within the study period. Outcome: The outcome for the primary objective is - the count of low-acuity ED visits per patient during fiscal years 2011 to 2014. The outcome for the secondary objective is - the total number of low-acuity ED visits per day (irrespective of patient). Results: As this is research in progress, the anticipated results from our primary analysis are that individuals who have greater access to after-hours care via their usual provider of care (i.e. FP) will make fewer low-acuity ED visits, compared to individuals who have lesser access to that same care. We also anticipate that fewer low-acuity ED patient visits will be associated with - greater (FP) continuity of care, better socio-economic statuses, fewer co-morbidities, and older age. From our secondary analysis, we expect to show that the relationship between after-hours patient visits (re: FP) and low-acuity ED patient visits varies according to day of the week and month of the year.

Drop the Pre-op: Reducing testing prior to low risk surgical procedures in Newfoundland and Labrador

Krista Mahoney

Context: Before patients undergo surgery, they are assessed to determine if it is safe for them to be placed under general anesthetic. This assessment can include such tests as blood work, ECGs, and Chest X-rays. Considerable research has shown that preoperative tests prior to low-risk surgeries are often unnecessary and do not inform clinical care. Choosing Wisely Canada has developed specific recommendations around the appropriate use of pre-op tests. Objective: To determine the rates of pre-operative tests pre- and post-roll out of a medical directive outlining guidelines for pre-op test ordering. Design: Retrospective cohort, pre-/post- design. Setting or Dataset: Population-based, ambulatory out-patient care. Secondary use data analysis. Data source: Eastern Health (OR Manager and Meditech), NLCHI (Meditech and DAD). Population Studied: Adults patients with a physiological status indicated by an ASA score of 1 or 2 (no physiologic or psychiatric disturbance and mild to moderate in NL scheduled to receive minimally and minimally-to-moderately invasive procedures. Intervention/Program: Medical directive roll out. Results: Data were collected for 3997 low-risk procedures pre-intervention (2016) and 4039 post-intervention (2017). Reductions in pre-operative tests from 2016 to 2017 as follows; Chest X-ray 23% to 10%, ECGs 69% to 32%, Creatinine 62% to 53%, INR 28% to 17%, and Hemoglobin 72% to 67%. Implementing the CWC recommendations in two hospitals resulted in over 500 patients/year avoiding unnecessary exposure to radiation from chest x-rays and a cost avoidance of \$97 000 in 2017. Conclusion: While there was a significant reduction in pre-op testing observed in the calendar year following the introduction of the medical directive, there is still ongoing unnecessary testing. We are currently conducting a barriers assessment to inform further intervention strategies.

Elements of a Robust Rural Family Practice: Resilience & Generalism Examined – Pilot Study

Andrew O'Dea

Context: Rural family physicians (RFP) have a broad ‘generalist’ skillset that is essential to high quality, broad based primary care in rural Canada. Yet, this skillset makes them highly susceptible to burnout, which contributes to RFPs intent to leave rural practice, thus exacerbating physician shortages in these areas. Resilience (dynamic, evolving process of positive attitudes and effective coping strategies) may buffer the effects of burnout, but this relationship and RFPs’ understanding and use of it, have not been adequately studied in the Canadian context. Objectives: 1) Pilot test the interview guide and identify opportunities for improvements. 2) Determine how RFPs define, and use strategies to strengthen their resilience 3) Investigate how resilience/mindfulness relates to a generalist scope of

practice among RFPs 4) Investigate the roles of organizational supports and strategies in promoting the resilience of generalist RFPs Design: Qualitative pilot study using two, 45-minute semi-structured telephone interviews. Setting: Rural Canada. Population Studied: Two RFPs with at least one year of practice in rural Canadian communities. Outcomes: The study is currently ongoing, but the pilot provided rich preliminary data for thematic analysis. Results: Neither interviewee reported any issues with the interview guide or questions. Three major themes regarding fostering resilience in rural family practice were identified: individual, professional, and system-related factors. Conclusion: Pilot interviews yielded three preliminary themes regarding spheres of influence for interventions: individual-based, practice-based, and system-based. Physicians may benefit from interventions at any level, but it appears that an intersectionality exists between these layers and interventions should target all three. Additional interviews are required to elucidate this matter further. This may be useful for developing resilience strategies to help foster RFP resilience in Canada and ease the burden of burnout on the healthcare system.

Engaging Newfoundland and Labrador in Designing an Integrated Perinatal Mental Health System of Care

Martha Traverso-Yeppez

Context: Maternal mental health during prenatal, childbirth, and postnatal periods is critically important for the mother, child and family health. Mounting research attests to the significance of quality parent-child interactions for infant brain development, including social competence, emotional maturity, and language, cognitive, and communication skills—the building blocks for health and well-being throughout the lifespan. In NL, there is a high incidence of maternal mental health challenges (anxiety, depression and other mood disorders) that are either undetected or inadequately supported, possibly adversely impacting the whole family. Objective: To investigate ways to enhance perinatal mental health screening, supports, and services for mothers struggling with mental health challenges. Design: A five-phase participatory research design (with environmental scan of best practices and interventions in English speaking countries and other Canadian provinces, existing perinatal mental health supports and services in NL, semi-structured interviews and public engagement dissemination events). Setting: The four regional health authorities of NL (Eastern, Central, Western, and Labrador-Grenfell). Population: Study participants are 32 mothers with experience of perinatal mental distress and 30 health and social service professionals, community-based agency personnel, and government leaders affiliated with perinatal mental health. Outcomes: Preliminary data analysis reveals perinatal supports and services are fragmented. Outcomes to be reported are aggregated research data and recommendations put forward by attendees at two public engagement events (a public Town Hall with mothers and a Deliberative Workshop with key stakeholders). An integrated perinatal mental health system of care including early screening, coordinated, timely follow-up, and consistent support networks is recommended.

Environmental contaminants in Newfoundland and Labrador: a population-based study to explore any association with relevant cancers.

Arifur Rahman

Context: People in Newfoundland and Labrador (NL) are exposed to arsenic and disinfection bi-products (DBPs); trihalomethanes (THMs) and halo-acetic acids (HAAs) by drinking contaminated water, pesticides by living in close proximity to agricultural farms and golf courses, and ultraviolet (UV) radiation from outdoor and indoor exposures. Arsenic is a naturally occurring element and known as a strong carcinogen. DBPs are formed by chlorination of water containing organic substances and considered a possible human carcinogen. Some pesticides used for grounds maintenance of golf courses are linked to certain cancers and exposure to UV radiation with a high UV index is associated with skin cancers. However, there is no population level data on any association between the

exposure to these environmental agents and related cancers. Objective: To explore whether there is any association between arsenic and DBPs present in water; UV radiation exposure or exposure to pesticides used in golf courses and relevant cancers at the community level in NL. Design, Setting and Population: An ecological analysis was conducted comparing cancer incidence rates between high and low exposure communities in NL. High and low risk communities with respect to exposure to arsenic and DBPs were identified based on water quality reports from provincial surveys. A list of communities and corresponding UV indices throughout the year (Jan 2013 to Jan 2019) were collected from Environment Canada and residences within 500m of golf courses in NL were selected from Google Maps with the help of the cartographer at the Queen Elizabeth II Library at the Memorial University. Communities with similar epidemiological characteristics except the potentiality of exposure to the environmental agent were selected as control groups. A literature search was done to determine which cancer types were associated with each environmental agent. This informed the cancer disease sites that were included in the analysis. Cancer data were extracted from the NL Cancer Registry for cases diagnosed between 2007-2016. Disease information including histology and topography and demographic information including sex, year of birth and residence at time of diagnosis were extracted. Relative risk and 95% CI of each exposure in relation to a cancer outcome was calculated during statistical analysis. Results: Communities with high arsenic exposure had 3.8 times greater risk (RR 3.8; 95% CI, 3.0, 4.9) of developing cancer with a known association with arsenic exposure (renal cell, squamous cell of lung and skin, basal cell and Merkel cell of skin, adenocarcinoma of colon and bile ducts, hepatocellular and angiosarcoma of liver, cholangiocarcinoma, and transitional cell carcinoma of urinary bladder) than the communities with low exposure. Communities exposed to high level of both THMs and HAAs showed 2.1 times higher risk (RR 2.1; 95% CI 1.9, 2.3) of developing DBP induced cancers (urothelial cell carcinoma of urinary bladder, adenocarcinoma of rectum, colon and esophagus, malignant mesothelioma of lungs, and acute and chronic myeloid leukemia) than the control communities. Communities with 8 or more UVI for 50 or more days throughout the year were found to have 1.3 times (RR 1.3; 95% CI 1.3, 1.4) higher risk of developing UV induced cancers (melanoma, squamous and basal cell carcinoma of skin) than the communities with <8 UVI for <50 days. For the communities located within 500m of a golf course, the risk of pesticide induced cancer (non-Hodgkin's lymphoma, multiple myeloma, adenocarcinoma of prostate, renal cell carcinoma of kidney, squamous cell carcinoma of lungs, acute and chronic myeloid leukaemia, acute lymphoid leukaemia, non-astrocytic neuroepileptical tumour of brain, and adenocarcinoma of ovary and pancreas) was 3.4 times higher (RR 3.4; 95% CI 2.8, 3.9) than the communities with low exposure. Conclusion: Population level data showed that environmental agents (arsenic, DBPs, UV radiation, and pesticides) were significantly associated with the risk of cancer. However, adjustment of confounding factors is necessary due to establish that certain cancers are attributed to a specific environmental agent.

Evaluation of Changes to Mental Health and Wellness Services on the Burin Peninsula

Janelle Hippe

Context: In 2017, access to mental health and addictions services was identified as an area requiring more focus on the Burin Peninsula. Development and evaluation of innovative approaches to timely service provision are critical to enhancing mental health and wellness in this area and across the province. Intervention/Program: Eastern Health has worked on a number of related primary health care initiatives on the Burin Peninsula to address mental health, including community capacity building, staff training, and the introduction of mental health walk-in clinics. Quality Improvement initiatives in Burin have eliminated wait lists and increased access to mental health services. Objective: This poster describes results of the ongoing evaluation. Evaluation objectives include analysis of: impact of the walk-in clinic, awareness of services, barriers to service use, impact of staff training efforts, and changes in community capacity to address mental health issues. Design: The evaluation design includes interviews along with collection of administrative and survey data. A client experience survey was developed by Eastern Health to gather

information on client satisfaction, referral source, challenges to service use, and suggestions for improvements. Setting or Dataset: The survey was administered from January 2018 to April 2019 to clients at walk-in clinics in Grand Bank, St. Lawrence, Marystown, and Placentia-West. Population studied: The survey was completed by 256 walk-in clinic clients. Outcomes: One year post-implementation, there was a 14% increase in counseling sessions delivered at the mental health clinics, with most clients receiving same day service. The majority of survey respondents (80%) waited less than 30 minutes at the walk-in clinic and felt the session was helpful (92%). Most respondents (88%) did not experience challenges using the walk-in service. Of those that reported challenges, transportation (n=12); hours of service (n=9); and stigma (n=5) were most common. Suggestions for improvement included enhanced privacy (n=9), increased staff and hours of service (n=6), and enhanced ability to make appointments or see specific providers (n=6). Conclusion: Preliminary evaluation results suggest that walk-in clinics may be an important way to increase access to timely mental health and addictions services.

Evaluation of the Family Practice Renewal Program

Melissa LeDrew

Context: The Family Practice Renewal Program (FPRP) was established in late 2015, through an agreement between the Newfoundland and Labrador Medical Association (NLMA) and the Department of Health and Community Services (DHCS) that recognizes a renewed focus on primary health care reform, and on family practice reform in particular. FPRP has three core initiatives that support a significant role for family physicians in the effort: Family Practice Networks, a Fee Code Program, and a Practice Improvement Program. Partway through implementation, the FPRP has been achieving outcomes that need to be measured and reported. The Newfoundland and Labrador Centre for Information (NLCHI) was contracted in 2018, to develop and implement an evaluation of the FPRP. Objective: To determine achievement of program goals and to offer a mechanism for continuous improvement as the program develops. The evaluation will provide ongoing evidence to inform decisions and to demonstrate accountability for achieving outcomes. Design: The evaluation framework was finalized and approved in April 2019. The design was led by the NLCHI evaluation consultant, in collaboration with program stakeholders. A mixed-methods approach will be employed to collect both quantitative data, from administrative sources such as the MCP Fee-for-Service Physician Claims Database, as well as qualitative data acquired through focus groups, interviews, and surveys. Setting: Provincial primary health care sector. Population studied: Mainly family physicians practicing in NL, however outcomes are also expected in other health care providers, the Regional Health Authorities (RHAs), and patients of family practices across the province. Outcomes: With a mission of transforming family practice for better health, the goals of the FPRP include: improved coordination of patient care; greater collaboration between family physicians, other providers, and RHAs; enhanced patient access to appropriate care; improved patient-physician attachment; improved patient and provider satisfaction; improved recruitment and retention of family physicians; and measurable improvements in system sustainability. Results/Conclusions: The first year of data collection is in progress. In February, the 2019 FPRP Physician Survey was sent out to collect a baseline of physician attitudes and behaviours. The survey received 157 responses from salaried and fee-for-service family physicians, which represented a 28% response rate.

Evaluation of the Newfoundland and Labrador Prescription Monitoring Program

Melody Sorenson

Context: Prescription drug abuse is a growing problem for jurisdictions across the country, with the abuse of prescription drugs such as opioids and other narcotic, controlled and monitored drugs substances being a major concern. It has been estimated that in the past 10 years the rate of hospitalization for opioid poisoning in Canada has increased by more than 50%. Opioids are particularly problematic given the high rate of misuse and diversion.

On January 1, 2018, the Prescription Monitoring Act came into effect in Newfoundland and Labrador which set forth the requirements for a provincial Prescription Monitoring Program to reduce the abuse, misuse and diversion of targeted prescription drugs with a high abuse potential. Objective: The evaluation is monitoring the operations of the program; determining whether the program has led to increased awareness among prescribers of their prescribing practices; and determining whether there has been a decrease in questionable opioid dispensing. Design: Mixed methods evaluation involving analysis of program data, surveys of prescribers and dispensers, and focus groups and key informant interviews with program partners. Setting/Dataset: Population based. Use of provincial Pharmacy Network data. Population studied: All prescribers, all dispensers, and all individuals in Newfoundland and Labrador receiving a prescription opioid. Intervention/Program: Prescribers must review a patient's medication history in the provincial EHR before prescribing one of the monitored drugs under the program and record the prescription on a Tamper Resistant Drug Pad. The program also requires dispensing pharmacists to review the patient's medication history in the provincial EHR prior to dispensing a monitored drug. The program alerts prescribers and dispensers of possible questionable activity through letters sent to them from the program with additional phone call follow up as required. Outcomes: Primary outcome is level of questionable opioid dispensing. Secondary outcome is prescriber awareness of their prescribing practices. Results: The number of patients that have had two or more opioid dispenses from two or more prescribers has decreased by 30% in the first year of the program. Outcomes to be reported: It is anticipated that provider awareness of their prescribing practices will increase with the introduction of individual prescriber prescribing profiles.

Exploring Factors Related to Infant Feeding in Women Intending to Exclusively Breastfeed in Newfoundland and Labrador, Canada

Hannah Buckle

Hannah Buckle, MPH(c); Susan Barry, MPH(c); Leigh Anne Newhook, PhD; Laurie Twells, PhD; Yanqing Yi PhD; Barbara Roebothan RD, PhD Context: Breastfeeding provides established health benefits for both mother and child, and is recommended for the first six months of life. Newfoundland and Labrador has held the lowest breastfeeding rates of all Canadian provinces for over a decade with approximately 72% initiating breastfeeding and some evidence to suggest only about 5% exclusively breastfeeding at 6 months postpartum . This study will contribute to the understanding of infant feeding practices in NL, and may support programming and policies planned to increase breastfeeding initiation and duration rates. Objective: To estimate the number of infants that were exclusively breastfed immediately after birth and at the time of the first postpartum survey (according to the FiNaL study); and to identify factors associated with the practice of exclusively breastfeeding. Design: Secondary data analysis of a longitudinal prospective study. Data analysis involved descriptive statistics, univariate and multivariate analysis. Dataset: Data analyzed for this investigation were collected by a longitudinal cohort study called the Feeding Infants in Newfoundland and Labrador (FiNaL) conducted in October 2011-2015 by Temple-Newhook, Newhook, Twells et al. Population studied: The population studied was composed of English-speaking new mothers over 18 years and residing in NL. Surveys were administered to women during their 3rd trimester of pregnancy, at 1-3 months postpartum and at 6-12 months postpartum. Respondents intending to exclusively breastfeed, EBF (n=533) were included in this study. Outcomes/Results: Reported EBF rates were 93.4% prior to hospital discharge, 74.7% at the first follow up and 46.7%. for infants aged >6 months. For infants 3-6 months of age (n=141), univariate analysis revealed that EBF was associated with the existence of a personal support system, income level, previous exposure to EBF and intention to EBF. Multivariate analysis on infants aged 1-3 months (n=150), revealed marital status and at least one hour skin to skin contact to be associated with EBF. Conclusion: While breastfeeding rates may still be low in NL as compared to other Canadian provinces, both initiation rates and duration of breastfeeding may be increasing. Many factors appear to influence mothers' practice of EBF.

Exploring the Barriers and Facilitators of Following a Meal Plan for Type 2 Diabetes: A Survey Using the Theoretical Domains Framework

Taylor Wilson

Context: Type 2 diabetes is a critical health problem in Newfoundland and Labrador. Currently, the Canadian Diabetes Association estimates that 182,000 residents in Newfoundland and Labrador are living with diabetes or pre-diabetes, which is approximately 35% of our population and the highest prevalence within Canada. Patients with this disease find it challenging to make health-related choices to reduce the negative impacts associated with diabetes on their long-term well-being and to improve their lifestyles. Using the Theoretical Domains Framework, we will identify what domains play a significant role in creating barriers and facilitators for the self-management of diabetes. **Objective:** To identify the key domains of the Theoretical Domains Framework that are impeding or enhancing healthy behavior related to the self-management of diabetes for subsequent use in developing an e-intervention. **Design:** Cross Sectional Survey **Setting:** Patients enrolled in the Remote Monitoring Program for Type 2 diabetes through Eastern Health, Newfoundland and Labrador. **Population studied:** Patients diagnosed with Type 2 diabetes and enrolled in the Remote Monitoring Program received the survey invitation (n=300). **Outcome Measures:** We measured the effect of 12 domains in the Theoretical Domains Framework on intention to follow a meal plan to help self-manage diabetes. **Results:** Multiple linear regression indicated only two significant predictors of meal plan intention, accounting for three quarters of the variance. Namely, Emotions ($=-0.648$, $p=0.003$) and Social Influences ($=0.475$, $p=.0026$) were the two key domains of the Theoretical Domains Framework that impact intention to follow a meal plan to help self-manage Type 2 diabetes. **Conclusion:** Emotional health and the influence of others in one's social environment are significant predictors of the intention to follow a meal plan for self-management of Type 2 diabetes. Future work will map these domains to the appropriate behavior change techniques for the creation of an electronic intervention.

Factors that Influence Registered Nurses' Professional Identity: Changes from Year 4 Student to Novice RN

Karen Street

Context: Confusion surrounding the role of the Registered Nurse (RN) and factors that contribute to the professional identity of the RN continues to be a focus of discussion within the profession. Research regarding elements that contribute to this professional identity, especially from the perspective of the RN and nursing students has been limited. **Objective:** The purpose of this study was to determine factors that Year 4 Baccalaureate Nursing (BN) students felt impacted the professional identity of the RN and to determine if there were differences in their perceptions from Year 4 (as a student) to two years post-graduation (as a novice RN). **Design:** This descriptive comparative study utilized a questionnaire that consisted of 31 items that were identified in the literature as being relevant to the topic of RN professional identity. Cronbach's alpha was used to estimate the internal reliability of this questionnaire (0.87). Three open ended questions were also included on the questionnaire to provide respondents the opportunity to identify any additional factors that were important to the professional identity of the RN. Responses were subsequently analyzed for themes. **Setting or Dataset:** Baccalaureate Nursing students (Year 4)/ novice Registered Nurses working in various healthcare settings **Population studied:** A convenience sample of Year 4 (Class of 2016) students enrolled in the BN Collaborative Program at the Centre for Nursing Studies were included in the initial survey (n=104). These same individuals were re-surveyed two years post-graduation when they were novice RNs. **Results:** Statistical analysis revealed significant differences in the item responses provided by the group two years later on eight of the 31 questionnaire items. Themes identified from the open ended questions remained similar between the two time-periods surveyed, however, the novice RNs did not identify as many additional factors contributing to professional identity as they did when they were Year 4 students. **Conclusions:** Year 4 students'

perceptions of what is important to the professional identity of the RN changed by the time these same individuals had been practicing RNs for two years. All eight items revealing significant differences in factors related to the professional identity of the RN showed a decrease in the level of importance from Year 4 student to novice RN. Further research is required to determine reasons for this change in perception over a relatively short timeframe.

Family Medicine Obstetrics in Residency: Program Evaluation

Russell Dawe

Context: Family physicians (FPs) are providing increasingly less low-risk obstetrics (LRO) care services across North America in recent years. Nevertheless, FPs offering LRO provide a continuity of care which many pregnant women value. FPs' clinical outcomes are similar to those of obstetricians. Family medicine residents who experience high quality, evidence-based obstetrics training integrated with family practice may be more likely to practice LRO. **Objective:** To evaluate the ongoing implementation of Memorial's Family-Centred Maternity Care (FCMC) program, exploring the effects of the program in relation to its intended outcomes. **Design:** Survey **Setting:** Academic clinic, Memorial University, St. John's, NL. **Participants:** Family medicine residents at Memorial University. **Intervention:** Memorial University's Discipline of Family Medicine has formed FCMC to provide patients with high-quality LRO care, train family medicine residents in LRO, and advocate for the practice of LRO among family physicians. **Main Outcome Measures:** Online surveys for residents (at beginning, midway and completion of residency). **Results:** Residents just starting their first year identified feeling 34% confident (n=20) in providing unsupervised LRO care. By comparison, this same cohort identified at the completion of their first year of residency feeling 50% confident (n=19) in providing unsupervised LRO care. 64% (14/22) of residents worked with FCMC during their first year of residency. Of these, 79% (11/14) agreed that FCMC added value to their residency training. **Conclusion:** This evaluation affirms the educational value of the FCMC program among family medicine residents at Memorial.

Feeling at home: social connectedness of newcomer immigrants and refugees in Newfoundland.

Grace Akese

Context: Social connections impact the physical, mental health as well as the general (holistic) well-being of all individuals. Existing research shows that lack of social connections put individuals at risk of anxiety, depression and other mental health disorders. As it is important and healthy for individuals already residing in a community to feel connected, it is much more important for newcomers or individuals new to a community to build and establish social connections within their new community. This is evident in growing research which attributes the significance of social connections to a variety of outcomes for newcomers including their physical and mental wellbeing as well as their successful settlement and integration into their new communities. **Objectives:** To explore the success of community connectedness of newcomer immigrants and refugees in Newfoundland **Design:** Qualitative research **Setting and population:** Immigrants and refugees (newcomers) in both rural (Clareville) and urban (St. John's) communities within Newfoundland. **Outcomes:** To identify the individuals, activities, infrastructures and institutions that assist newcomers in becoming connected in their new communities. To identify the challenges that hinder newcomers from feeling connected and at home within their new communities. **Results:** Preliminary results show that social connections are deliberately built and fostered over time. Newcomers report that it takes conscious effort and resources to build a sense of belongingness and connectedness within their new communities. They build, access and navigate different social connections through their work, neighbourhoods, settlement organizations and

within other immigrant groups. For settlement organizations that run newcomer social connections programs, individuals report that such program are often not integrated into existing community groups and infrastructure; they operate short term, leaving refugees in particular to navigate their connections after a period of time.

Her Health: Sharing Health Information with Newcomer Women in our Community

Sarah Devereaux

Context: It has long been recognized that immigrant and refugee populations in Canada commonly experience poorer health than their non-immigrant counterparts. One reason for this inequity is the compromised access to health care and health care related-information commonly experienced by newcomer populations. For newcomer women in particular, challenges such as low health literacy, language barriers, and discrimination, which are often experienced by newcomer populations in general, are compounded by gender inequities and cultural norms and values that can serve to reduce a woman's access to health care and health-related information. Scheduled to begin on June 24th 2019, Her Health is a new women's health program developed through a collaboration between MUN's Faculty of Medicine and the Association for New Canadians. **Objectives:** The primary objective of Her Health is to improve access to health-related information among immigrant and refugee women living in St. John's and surrounding areas. Our second objective is to provide medical students with the opportunity to engage in meaningful cross-cultural experiential learning through knowledge translation with a population that often faces many barriers to accessing health care and health-related information. Lastly, we hope that our program sends an important and valuable message to our local community of newcomer women, our medical school, and our province as a whole: that newcomer women in our community have an equal right to access information related to their health and well-being, and should be supported in exercising this right by our health care system and our community. **Design:** During each information session, medical students and women will engage in a discussion guided by visuals in a PowerPoint presentation, as well as videos and props. Examples of proposed topics include: family planning and contraceptive options, ante- and post-partum maternal mental health, breast cancer screening, cervical cancer screening, mental health and well-being, work-life balance, sleep, and domestic and sexual violence against women. Our first session, scheduled for late June 2019, will be on the topic of cervical cancer screening and will include information about what a Pap test is, what women can expect to happen during the exam, what is involved in follow-up after the test, how and where women can receive a Pap test, and more. Presentations will be developed and delivered by medical students, under the supervision of our physician mentors from our Refugee Health Clinic, Drs. Christine Aubrey-Bassler and Petra Joller. Interpreters in all necessary languages will be present for women who are in the process of learning English. We will also provide paper copies of resources related to the session topic for the women to take home with them as well, which will be translated to the languages of our program participants. **Setting:** All information sessions will occur at the ANC ESL Training Centre, where our participants attend school Monday through Friday. **Population:** Refugee and immigrant women in St. John's and surrounding areas. **Expected outcomes:** Through Her Health, we hope to contribute to the health of immigrant and refugee women in our community, while providing medical students the opportunity to engage in meaningful community engagement with a population that often faces many barriers to accessing health care and health-related information.

How to determine the study designs used in the articles included in your scoping review

Mark Howell, Harith Al-Obaidi, Brad Furlong, Carla Penny, Andrea Pike, Amanda Hall

Context: Scoping Reviews often tend to describe the state of science on a broad topic area. In many cases, this means that the review authors will decide to include multiple study designs in order to provide a complete picture of the work that has been done in the area to date. Reporting what study designs have been used in the literature

is a key feature of scoping reviews as it helps to clearly identify the level of evidence that is available on a given topic. This can be helpful for making recommendations about the directions for future research. However, one area for concern when including multiple study designs, particularly observational designs, is poor reporting of the methodology, which can impact on understanding what study design was actually used. This was the case in our current scoping review on what interventions have been evaluated to improve primary care in rural settings. Aim: To describe our process for determining what design was used by each of the included studies in our scoping review. Results: We consulted two main documents to help create our framework for determining study design. First, a key document on the differences between experimental and observational study designs. Second, the Effective Practice and Organization of Care (EPOC) Cochrane Review Group's flow chart for determining study designs. We adapted EPOC's flow chart to include additional study designs and create working definitions to help develop a reliable coding system for our review team to use when determining the study design that was used in each of the included articles in the scoping review. We would recommend using this approach for other scoping reviews of broad topics that will expect to include a wide range of evidence.

Identifying Competencies for Registered Nurses in Primary Care: A National Delphi Study

Julia Lukewich

Context: Registered Nurses (RNs) in primary care (commonly known as “family practice nurses” and “primary care nurses”) provide feasible and affordable solutions to issues facing Canada's primary healthcare systems. RNs in primary care improve access to primary care and continuity of care, reduce healthcare costs, and promote high quality care. A clear set of defined competencies for RNs in primary care in Canada are essential to optimize the integration of this role within inter-professional teams. Objective: To develop a national set of competencies for RNs in primary care. Design: A Delphi survey methodology is being employed to obtain national consensus from a panel of experts/stakeholders on a set of competency statements for RNs in primary care (in-progress). Setting or Dataset: Primary care. Population studied: Nurses with knowledge, expertise, and/or experience related to RNs in primary care practice across all provinces/territories and domains of nursing (e.g. clinical practice, education, research, policy, administration). 137 participants were identified through snowball sampling, online searches, and professional associations (e.g. Canadian Family Practice Nurses Association). Outcomes: The competencies are organized across 6 domains: (1) Professionalism, (2) Clinical practice, (3) Communication, (4) Collaboration and partnership, (5) Quality assurance, evaluation, and research, and (6) Leadership. These competency statements reflect entry-to-practice competencies for RNs within the primary care setting. Participants were asked rate their level of agreement for each of the 49 individual competency statements on a 6-point Likert scale. Consensus on a competency statement was defined as $\geq 80\%$ agreement (or a mean score ≥ 5.0). Results: In total, 62% ($n=85/137$) of participants completed the first round of the Delphi survey. Of the 49 competency statements, 45 statements achieved consensus (mean score across all statements = 5.4 ± 0.223). Statements that did not meet consensus will undergo revision by the research team and be included in the second round of the Delphi survey (anticipated date of completion: Fall 2019). Conclusion: Clearly defined national family practice nursing competencies will contribute to the understanding of the role, improve inter-professional team functioning, and guide professional practice. The Canadian Nurses Association (CNA) plans to incorporate these competencies into the CNA Community Health Nursing (CHN) Certification exam. Furthermore, findings will aid provincial governments in actions targeted at the integration/optimization of RNs within primary care and help shape the development of competencies for RNs in primary care internationally.

If you want to go fast, go alone. If you want to go far, go with others: Evaluating patient oriented research

Holly Etchegary

Context: Patient centered care and shared decision making models foster the idea of patient engagement in primary care. Patient engagement might also improve the quality and outcome of primary care research, though few evaluations exist. NL SUPPORT aims to build capacity for patient-oriented research (POR) in Newfoundland and Labrador by offering grants to support it. **Objective:** To evaluate student and researcher-led projects funded by NL SUPPORT since 2015. **Design:** Mixed methods evaluation consisting of Phase 1 surveys (complete) and Phase 2 group discussions (ongoing) **Setting:** Members of POR teams funded through NL SUPPORT were eligible for the study, including students, principal investigators and patient partners. Members of the patient advisory council chose key evaluation questions and measures. **Population:** 32 funded researchers, students and patient partners completed evaluation surveys. **Results:** Positive evaluations of POR were reported, including high levels of satisfaction, the belief that patients added value to research and that research teams acted on patient input. **Challenges** noted were time commitment, giving patient partners real responsibility for portions of the research work and helping students engage with patients earlier in their projects. **Conclusions:** POR was rated highly by research teams funded through NL SUPPORT. Students reported less opportunity to partner with patients, despite a desire to do so. Ongoing training and support in POR is needed in order to fully integrate patients on research teams and effect real change in health systems.

Impact of Midwifery on Infant Feeding Outcomes in Newfoundland and Labrador

Rosemary Stanoev

Context: Historically, midwifery played a strong role in maternal and child care for women, families, and communities in Newfoundland in Labrador (NL). However, after confederation in 1949, the Government of NL revoked the need for midwives. The profession is being reintroduced into the provincial healthcare system, initially in Gander. Midwives in NL will have the ability to act as primary care providers for women throughout prenatal care, labour, birth, and postpartum. For many years, breastfeeding rates in NL have been significantly lower than the Canadian average. Will the introduction of midwifery influence these low breastfeeding rates? **Objective:** The primary research question for this study is: What is the impact of midwifery-led care (MLC) on exclusive breastfeeding rates at two months postpartum, in healthy full-term infants born in Gander, as compared to Clarenville and Corner Brook with physician-led care (PLC)? A secondary objective is to compare breastfeeding rates in hospital, at discharge, two, four, and six months of infants in MLC and PLC. Another secondary objective is to examine differences between MLC and PLC regarding infant and maternal health outcomes. **Design:** Cohort Study. **Setting:** MLC may be provided either in hospital or in the community. The data to be used in this study is from secondary sources: NL Centre for Health Information (Live Birth System Database and Client and Referral Management System) and Perinatal Program NL. **Population Studied:** The study will include pregnant women (aged 18 or older) with a singleton full term (37 to 42 weeks' gestation) live birth in Gander, Clarenville, or Corner Brook. The first cohort includes women receiving MLC in Gander, and the second cohort includes women receiving PLC in Clarenville and Corner Brook. Sample size was determined using a power calculation. It is estimated that a sample of 277 is required in each group (80% power, alpha of .05, two-tailed). **Outcomes:** The primary study outcome is exclusive breastfeeding rates at two months postpartum. Secondary study outcomes include breastfeeding rates in hospital, at discharge, two, four and six months postpartum. Other secondary outcomes include maternal and infant health outcomes such as caesarean section rates, birth complications, interventions during labour and delivery, size for gestational age, Apgar scores, and neonatal complications. **Results:** Research is currently in progress. We expect to find that exclusive breastfeeding rates at two months postpartum are higher with MLC than with PLC.

We also expect MLC to have higher breastfeeding rates, lower rates of intervention during labour and delivery, and fewer complications than PLC. Implications: This is a positive opportunity to research the initial health outcomes associated with midwives as primary care providers in order to inform future practice, policy, health guidelines, and research. If breastfeeding rates are found to improve, this research may support further recruitment of midwives in the province, thus benefiting both infant and maternal health.

Increasing Social Capital through a Rural Research Capacity Building Program

Thomas Heeley

Study Question: Is provincial health administrative data a valid source of information on chronic pain in NL? **Context:** Contemporary science is increasingly multidisciplinary, and collaboration has never been more crucial. This presents a challenge for rural physicians, who often cite limited or non-existent scholarly connections as a major barrier to conducting research. To address this, we have created two programs, 6for6 and Rural360. These programs aim to foster a community of research practice among rural physicians, fostering or exchanging shared research relationships and scholarly values, or social capital. In this study, we assess social capital within this community of research practice. **Objectives:** In this study we aimed to 1) Define the components of social capital; 2) Assess social capital within the community of rural research practice; 3) Determine the mechanism by which 6for6 and Rural360 enhance, build, or contribute to or foster social capital. **Design:** Mixed-methods study using pre-post surveys and focus groups. **Setting:** 6for6 and Rural360 are housed at Memorial University of Newfoundland's Faculty of Medicine (St. John's Campus) with participating physicians from rural Newfoundland, Labrador, and Nunavut. **Population studied:** Five cohorts of six rural physicians (n=30) from 2014-2019. **Study outcomes:** The primary outcome was social capital measured in three components: relational, structural and cognitive. Secondary outcomes include the subcomponents of relational, structural and cognitive social capital, and qualitative data from participant focus groups. **Results:** We found universal increases in cognitive (34% to 92%), structural (43% to 94%), and relational (12% to 76%) social capital. We also observed global improvements in the three sub-components of cognitive social capital, specifically collective knowledge of research concepts (22% to 95%), shared norms and values (24% to 90%) and shared attitudes toward conducting research (55% to 91%). Derivation and analysis for relational and structural subcomponents is ongoing. Focus group responses support our findings; for example, one participant noted that "[6for6] nurtures rural research... it closes this gap that exists between rural and urban... it is a support system and it evolves into a network." **Conclusion:** Research capacity building programs like Rural360 and 6for6 can foster collective values, quality relationships, and communities of practice among research-focused rural physicians.

Infant Mental Health and its Promotion: Understanding the Training Needs of Public Health Nurses in St. John's, NL

Emily Noorton

Results: 195 administrative data algorithms combining diagnostic and procedure codes were initially developed and 80 were tested for validity in the CPCSSN population. The optimal algorithm had 70.3% sensitivity, 66.8% specificity, 40.8% positive predictive value, 87.3% negative predictive value, 2.115 likelihood ratio positive, 0.445 likelihood ratio negative, 4.754 diagnostic odds ratio, and 0.685 area under the Receiving Operator Characteristic curve. The algorithm had a 0.298 Kappa agreement with the CPCSSN data. **Context:** Research firmly supports that positive experiences and healthy environments are critical to ensuring an infant meets their neurodevelopmental goals from birth into adulthood. However, translation and integration of this research into the training of public health nurses (PHN) has been slow despite the key role that PHNs play in supporting infant mental health (IMH) and wellness **Objective:** To explore the extent to which IMH and its promotion is translated and integrated into the

education of PHNs trained and working in Newfoundland and Labrador (NL). Secondary objectives: 1) To explore PHNs' recollection of their exposure to IMH and its promotion during their formal nursing education in NL; 2) To describe what PHNs in St. John's, NL need or want to know about IMH and its promotion; and 3) To explore the potential barriers to the translation and integration of IMH research into the education of PHNs in NL. Design: Qualitative case study Setting: Community-based Population studied: 8-10 public health nurses who were trained at MUN's Faculty of Nursing or the Centre for Nursing Studies within the last two revisions of the curriculum. Four key-informants who provide expert information about what they believe are gaps in the training needs of PHNs in the field of IMH in NL. Outcomes: The primary study outcome will describe the extent to which research about IMH and its promotion have been integrated and effectively translated into the education of PHNs trained in NL. Results: In the event that preliminary results are not available, this presentation will offer an overview of what we currently know about this issue and point to the relevance of conducting this CIHR-funded research in NL.

Investing in healthy babies and healthy mothers: a patient oriented approach

Alicia Taylor

Context: Research shows that there is an economic, not just health benefit associated with increased breastfeeding rates due to reduction in infant and maternal disease, decreased use of health care services, reduced absenteeism at work by caregivers, and reduced costs to society due to environmental impacts. Objectives: a. What are the differences in health services use (HSU) in the first year of life by infant feeding mode? (i.e., Exclusive, Mixed & Formula Feeding) b. What are the potential cost savings associated with increasing EBF duration in Canada? (i.e., Increasing rates from 31% to 50%, 75%, 90%) Design & Dataset: a. A data linkage pilot will be performed to examine HSU of infants within their first year of life from the Eastern Health Region of NL comparing self-reported, chart reviewed, and actual data collected from the FINAL study and the Newfoundland and Labrador Centre for Health Information (n=163). This will provide an extensive database of HSU on this population, and allow us to examine the use of the health care system in our province, and compare this use by differences in mode of infant feeding. b. From there, based on actual and modeled data we will develop an economic model that can estimate the cost savings attributable to increasing breastfeeding rates across Canada. Total cost savings will be estimated using a framework that includes an incidence-based disease model, estimates of lost productivity from time off work, reductions in premature death and infant mortality, and an assessment of the environmental impact of not breastfeeding. Outcomes: a. Family Doctor Visits, Specialists Consults, Diagnostic Radiologist Visits, Emergency Room Visits, Hospitalizations b. Cost savings attributable to increasing breastfeeding rates (Direct, Indirect, Intangible, Environmental) Anticipated Results: Based on the literature, there is an anticipated difference in health care service use based on infant feeding mode, and that there would be significant cost savings attributable to increasing breastfeeding rates if they are achieved. Conclusion: Breastfeeding has the potential to reduce the rates of infant and maternal illness, healthcare usage and our own carbon footprints. Breastfeeding is an investment in health care sustainability and overall health.

Medicalising the Modern Death: Exploring Changing Perceptions of Death and Dying in a Rural Newfoundland Community

Timothy Collier

The following work explores the ways in which the material and ideological realities of our contemporary time affect our perceptions and experience of death. It draws on qualitative fieldwork conducted in a small rural Newfoundland community to test the hypothesis that death becomes more socially feared when it is under the control of rationalised medicalisation. Findings support the hypothesis that as the process of death is taken out of the home and the dying are increasingly segregated to institutions like the hospital, there is a corresponding increase in social

anxieties surrounding death. Furthermore, structural social factors conspire to necessitate the institutionalisation of the dead and dying. Although the majority of the study sample related a wish for the to die at home however, given contemporary socioeconomic structures, they are more likely than ever to experience a dehumanizing institutional death. The conclusions of this study indicate that programs allocating resources towards home-based hospice care and support for lay-caregivers could both alleviate strains on healthcare infrastructure and improve the experience of people at the end of life.

Medication Use After Laparoscopic Sleeve Gastrectomy: Results from the NL Bariatric Surgery Cohort Study

Malcolm Snow

Context: Following bariatric surgery, patients use of medications may change as they experience significant weight loss and improvement or resolution of obesity-related medical conditions. Published data on medication changes following laparoscopic sleeve gastrectomy (LSG) are limited. Primary care physicians may find this information useful when providing post-surgery care to patients after LSG. **Objective:** To examine: changes in patient's self-reported use of antidepressants, analgesics, anxiolytics/sedatives/hypnotics, and laxatives in the two years after surgery compared to baseline. Changes in Quality of Life (QoL) will also be explored in relation to these changes in medication use. **Design/Setting:** A retrospective study of prospectively collected data at a single-centre was conducted. A nurse-practitioner collected medication use data using a medication reconciliation and data-extraction form developed for the study. Data were analyzed using generalized estimating equations. Outcome measures included: changes in medication use every six months for two-years, and QoL data via the Short Form (SF) 12v2 questionnaire. **Intervention:** LSG is a surgical procedure that has been performed in Newfoundland and Labrador since 2011. During the procedure, roughly 75% of the stomach is removed, leaving a gastric "sleeve." LSG is currently the most frequently performed bariatric surgery in Canada today. **Population:** 201 patients (82% female) who underwent LSG surgery between May 2011 and July 2014 were enrolled and followed for two years. **Outcomes:** Overall, there were decreases in the use of medications for three of the four medications, and an increase in one of the medications. QoL scores after surgery were approaching normal Canadian scores. **Results:** Compared to baseline: the use of antidepressants, anxiolytics/sedatives/hypnotics, and analgesics decreased after surgery. The proportion of patients using laxatives increased three-fold as early as 1 month after surgery. **Conclusions:** In the two-years after surgery, patients reported improvements in physical and mental-health related QoL. These

NP E-Mentorship: Does it Ease the Transition to Clinical Practice

Valda Duke

The first year of practice as a new Nurse Practitioner (NP) is a challenging and important time of transition. Ensuring this transition is smooth is essential to the long term success of the novice NP (Beecroft, Santner, Lacy; Gerhart, 2011; Harrington, 2011). All novice NPs, whether it is new graduates or expert RNs evolving into NPs, undergo a time of transition. Many new NPs report this time to be stressful, overwhelming, and frustrating (Gerhart, 2011; Poronsky, 2012; Hill & Sawatzky, 2011). These reported feelings of the novice NP could be eliminated or decreased with adequate support in their new role (Szanton, Mihaly, Alhusen, & Becker, 2010). This support could be implemented as an e-mentorship program to novice NP graduates. An e-mentorship program would provide support through electronic means (email, telephone) to the novice NP, during the first year of independent clinical practice. In a needs assessment which was conducted on the NPs on NL, 100% of the respondents felt there should be a mentorship program, 50.91% replied they did not have a mentor when they began their NP role, 96.36% replied they felt a mentorship program is important in enhancing competence, and 98.19% saw a mentorship program as important in assisting to overcome fear and anxiety. While mentoring

has been explored in the literature for novice nurses, little is found in relation to the need for mentoring novice NPs (Gerhart, 2011). This identified gap warrants further exploration. Objectives of this study are: To explore the NP self-rated confidence and anxiety level in relation to clinical decision making before and after completion of the e-mentorship program; to explore what are the benefits, challenges/barriers of e-mentorship with Nurse Practitioners entering new NP roles; and to explore what are the mentorship needs of Nurse Practitioners entering new NP roles in the practice setting. This study is a non-equivalent control group repeated measures design. A convenience sample of approximately 12 recent NP graduates will be invited to complete the study. A comparison group of recent graduates of an NP program will be notified via email from the e-mentorship program coordinator to invite them to participate in the study. Mentors would be invited to participate in this study via email by a e-mentorship program coordinator. This study is approved by the HREA and each of the four Regional Health Authorities in NL. Recruitment process has begun. This study represents an opportunity to explore the usefulness of using an e-mentorship program to increase confidence and decrease graduate nurse practitioner anxiety related to transitioning into independent practice.

Other End of the Leash: the Lived Experiences of St. John Ambulance Therapy Dog Program Volunteers in St. John's, Newfoundland

Julie Carberry

Context: Animal assisted therapy (AAT) has existed in various forms for centuries (Hosey & Melfi, 2014) and in the past 30 years there has been a dramatic increase in popularity. AAT, animal assisted interventions, and animal assisted activities are now part of the lives of persons of all ages in many types of institutions (Matuszek, 2010). Anecdotal evidence of the benefits of AAT has led to its widespread adoption, yet there remains a lack of solid research base to support it (Palley, O'Rourke, & Niemi, 2010). Most studies in this field are quantitative in nature (Stern & Chur-Hansen, 2013) and highlight the physiological, social, and emotional benefits of AAT using dogs (Morrison, 2007; O'Haire, 2010). Although there are qualitative studies that explore the field of AAT through the perspective of practicing professionals as well as studies that explore through the perspectives of the recipients of AAT, there is only one published study from 1992 considering the perspectives of volunteer dog-handlers (Savishinsky, 1992). Objective: My research question is: what are the lived experiences of the St. John Ambulance Therapy Dog Program volunteers? Design: A descriptive phenomenological methodology was used for this qualitative study. Data was collected from 1 - 2 hour long semi-structured open-ended interviews. All interviews were conducted, transcribed, and coded for themes by the principal investigator. Setting or Dataset: Community based. Population studied: Inclusion criteria – must have been an active St. John Ambulance Therapy Dog Program volunteer for a least a year. 14 AAT volunteers participated in the research. Intervention/Program: The St. John Ambulance is a not for profit organization that enables Canadians to improve their health, safety and quality of life by providing training and community service. The Therapy Dog Program is one of the St. John Ambulance's four nationally recognized core community service programs. Results: 8 themes emerged from the analysis of the data: win-win-win, spreading smiles, socialization, other end of leash, altruism, purpose and meaning, feeling good, and distress. Other insights were found regarding the program, the patients, and the dogs. Conclusion: Possible implications from this research include support for the use of AAT with teams of volunteer handlers and their dogs. This support could in turn affect overall support for the acceptance of -- and broad implementation of -- AAT as a potentially prescribed complementary, alternative, or even nonpharmaceutical therapy. KEYWORDS: animal assisted therapy, qualitative, phenomenology, volunteer, dog. LIST OF REFERENCES CITED Hosey, G. & Melfi, V. (2014). Human-animal interactions, relationships and bonds: a review and analysis of the literature. *International Journal of Comparative Psychology*, 27(1), 117-142. Matuszek, S. (2010). Animal-facilitated therapy in various patient populations. *Holistic Nursing Practice*, 24(4), 187-203. Morrison, M.L. (2007). Health benefits of animal-

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Paramedics Providing Palliative Care - A Pilot Program

Megan Carey

Context: In a partnership with the Canadian Partnership against Cancer (CPAC), and the Canadian Foundation for Healthcare Improvement (CHFI), Eastern Health (EH) has designed and implemented the Paramedics Providing Palliative Care Program in the St. Johns Metro Region of this province. Paramedics Providing Palliative Care is a rapidly growing initiative designed to address some of the current gaps in palliative care across the country. Recent studies of Canadian citizens show that although most palliative care patients state they would like to die at home, sadly 70% end up dying in a hospital setting. In fact, some provincial surveys have shown that fewer than 1 in 6 people were actually able to receive palliative care at home, which significantly impacts this populations overall goals for care. This program was designed through a multidisciplinary collaboration to not only provide access to palliative care services 24 hours a day, but to encourage early integration into palliative care for patients who have yet to be consulted. In this program, trained paramedics are able to operate using a catch and release model where, when a palliative care patient calls 9-1-1, then can treat them in the home and leave them there, rather than transporting them to the local emergency room (ER). Although there is a lack of information in the area, limited data does suggest that few health care providers in Canada specialize primarily in Palliative care. In our province, a number of palliative patients are managed by family doctors or nurse practitioners. In addition, an international survey of primary care physicians showed that on average Canadian doctors feel less prepared than their peers in other countries to manage palliative care. Therefore, it is important not only to increase palliative care resources, but also to increase awareness of palliative care services. In order to ensure the program is achieving optimal success, EH has partnered with the Newfoundland and Labrador Centre for Health Information (NLCHI) to evaluate the program in a number of areas including: patient/family satisfaction with care; paramedic engagement, confidence, knowledge, and comfort; collaboration with and engagement of other partners and palliative care practitioners; impact of program on health care system (e.g., total number of calls, time on call for paramedics, number of transports of palliative care patients...); and use of clinical practice guidelines. **Objective:** The main objective of this project is to improve the quality of life for patients experiencing a palliative illness in NL through implementation of a model of home-based palliative care provided by paramedics. Through the continuous and lengthy project evaluation, it is the goal to ensure not only that the project is effective, but that its design is beneficial to the patient and practitioner populations. **Design:** The evaluation of the project will be conducted in a joint effort between Eastern Health, NLCHI, and the Partnership (i.e., CPAC and CFHI) and will include a number of mixed method interventions over the next few years. Surveys will be distributed to key stakeholders, patients/families, and paramedics to explore their experiences with the program. Key informant interviews will also be used to explore the experiences, attitudes, comfort, and knowledge of paramedics in the area. Finally, call data will be analyzed and reported on by our Computer Assisted Device (CAD) provider, to reveal the impact on the system. **Setting or Dataset:** This program is currently only being offered to those in the St. Johns Metro region of NL, as only EH paramedics are participating in palliative care training currently. **Population studied:** Participants in the program must be referred to any of the Palliative Services offered by Eastern Health (i.e., Palliative Care, Pain and Symptom Management,

and Community Health Palliative Services), and they must live within the EH Paramedic catchment area which includes: communities along Route 10 to Witless Bay; and communities to the north of Goulds, Mount Pearl and Paradise, excluding CBS and Bell Island. We are expecting approximately 2500 participants to be enrolled in the program within the first year. Intervention/Program (only for interventional studies or program descriptions): The Paramedics Providing Palliative Care program is closely modelled after currently operational programs existing in Alberta, Nova Scotia, and Prince Edward Island. Each patient who is referred to palliative care in the St. Johns Metro region is automatically considered for enrolment in this program. Palliative care practitioners are responsible for enrolling their patients using an online format, where patients are then approved by the Provincial Medical Oversight office. After the patient is approved, they are admitted into the Special Patient Program, and given a unique identifier that they can use to access paramedic palliative care at any time. When a patient in this program experiences an emergency they are to call 9-1-1, and identify their unique Special Patient Number to the Medical Communications Officer, who will dispatch the Paramedics to the caller's location. They will then electronically send select patient information, such as diagnosis, to the responding paramedics so they will know who the patient is and what type of assistance they require via the information collected using the online registry form. The ambulance will be dispatched without lights and sirens. When the paramedics arrive, they will then help manage symptoms through a number of supportive and medication based interventions. Once the symptoms are under control, the paramedics will leave a note in the patient's Home Chart that allows for communication with other health care professionals. Additionally, once the patient's information is retrieved by the dispatcher, an automated message is sent to the patient's health care team stating that the paramedics responded to the assistance of an enrolled Special Patient. This notification asks that the patient's team follow up to help the patient manage any changes to their condition. This information is then captured by the CAD system, allowing us to know who uses the program, and how often. Outcomes: The primary outcome of this program is to improve the quality of life of palliative care patients in NL, while increasing paramedics comfort and confidence in providing palliative care in the home. Results: This program has just been implemented in the St. Johns metro region, and program evaluation is in the initial stages. We do however, anticipate results similar to evaluations in regions where this program currently is operational. This includes: increased symptoms management in the home; emergency services time savings; patient preferred location of care; increased care satisfaction; and increased paramedic comfort and confidence in palliative care. Conclusion: Although the Paramedics Providing Palliative Program is a new initiative within Eastern Health, it is part of a fast growing expansion of paramedic care currently taking place across the country. Over the next three years, EH will partner with a number of internal and external stakeholders to provide a detailed ongoing evaluation of the current program design and project outcomes. This poster will provide a detailed exploration of our current progress, and plans for the future.

Parental Patterns and Perceptions of Cannabis Use During Pregnancy and Breastfeeding in St. John's, Newfoundland

Sarah Manning

Context: On October 17th, 2018, recreational cannabis use became legalized in Canada. The Society of Obstetricians and Gynecologists of Canada (SOGC) recommends that women who are thinking about becoming pregnant, pregnant, or breastfeeding should abstain from using cannabis. This is because THC has the ability to cross the placenta and enter fetal tissues during pregnancy and accumulate in breast milk postpartum. However, there is some evidence that pregnant women may be using cannabis to treat morning sickness. Objective: To determine the parental perceptions and patterns of cannabis use during pregnancy and breastfeeding in an obstetrical unit at the Health Sciences Centre in St. John's, Newfoundland. Design: Survey. Setting: Obstetrical patients. Population Studied: To be included in this study participants must be a parent or partner of a parent that is currently

pregnant, or has given birth in the last 6 months. Outcomes: 1) The percentage of parents that use cannabis during pregnancy or breastfeeding. 2) The percentage of parents that believe that using cannabis during pregnancy and breastfeeding has a low risk of causing harm to the pregnancy or infant. 3) Correlations between parents that have these perceptions and various sources of information on cannabis and pregnancy. Anticipated Results: We hypothesize that many parents who use cannabis during their pregnancy or while breastfeeding perceive that there are no risks associated with this. Conclusion: We will be trying to determine if cannabis use during pregnancy and breastfeeding is linked to parental perceptions that cannabis use during pregnancy and breastfeeding is low risk. We will then determine where parents are finding information on cannabis use during pregnancy and breastfeeding to aid in the development of patient education on this topic.

Patient travel for medical appointments within Newfoundland and Labrador

Tracy Parsons

Context: People in Newfoundland and Labrador often have to travel within the province for medical procedures, diagnostics and consultations. This is especially significant in rural areas where services or physicians are not available. It is important to get a better understanding of the burden to patients and whether any patterns exist by examining the types of visits that most frequently require travel. This work can be used to identify potentially avoidable travel, and assess whether there is an opportunity to utilize services such as telehealth. Objectives: To determine the frequency of patient travel for specialist visits and laboratory testing prior surgery from defined geographic areas (primary health care catchment areas) in the province of Newfoundland and Labrador. Design: Cross-sectional study Setting or Dataset: Population-based study utilizing the Provincial Discharge Abstract Database, MCP Fee-for-Service Physician Claims Database, the Provincial MCP Beneficiary Registry, the Provincial MCP Provider Registry 2017 and Provincial Meditech Laboratory Data. Population studied: Any individuals who visited a fee-for-service physician and/or who had surgery and laboratory testing performed prior to surgery were included. Individuals who only visited salaried physicians were not included since data is not available for this cohort. Outcomes: Outcomes to be reported will include the demographics of the patient population by primary health catchment areas as well as the number and type of visits. Proportions and frequencies will be calculated. Results: Anticipated results will: 1) show the burden of travel for individuals from select primary health care catchment area by physician specialty and 2) the potential for minimizing travel for pre-admission bloodwork.

Perspectives of the health providers, residents and families on a deprescribing intervention in long-term care

Cathy Balsom

Context: A deprescribing study was completed at St. Patrick's Mercy home to assess whether the number of unnecessary or potentially harmful medications consumed by the residents could be safely reduced. A mean of 2.78 medications were safely discontinued at 6 months. Here we present a follow up qualitative assessment to understand the views of health providers, residents and families to understand their perspectives regarding the implementation of the deprescribing intervention. Objective: To capture the perspectives of the health providers, residents and families involved in the deprescribing intervention regarding (1) the impact of deprescribing on: resident health, (2) professional practice and interprofessional collaboration barriers in deprescribing, (3) advantages to deprescribing and (4) their overall view of deprescribing. Design: Semi-structured interviews were conducted with those involved in the deprescribing project in the role of either a: Physician (n=1), Nurse (n=4), Pharmacist (n=1), Pharmacy Student (n=1), Resident (n=3), Family member (n=2). Setting: A Long Term Care Facility (St. Patrick's Mercy Home) in St. John's, NL Population: Participants in the deprescribing project who resided on the 2nd floor of St. Patrick's Mercy Home. Outcomes: 4 common themes were identified: Education needed to decrease the barriers to

deprescribing, lack of information presents a challenge, coordination of health care and medication overuse. Results: Study results indicate a need for education on the importance of deprescribing and more awareness that making no changes to medications over time is a decision which could lead to harm. Indicating the intended duration of therapy or timeline for assessment when initiating a medication could help to minimize medication overuse. Having a pharmacist present for quarterly medication reviews at the home could lead to more efficient interprofessional collaboration. A medication review with a focus on deprescribing performed at the time of a resident's admission may be helpful to decrease medication overuse Conclusion: With a greater understanding of the obstacles faced in deprescribing, more could be done to address present barriers further deprescribing initiatives can be better informed

Pre-emptive nature of special education

Sharon Penney

Context: Given the growth of scholarship in early childhood education (ECE), as well as the rapid emergence of the sector as an area of academic inquiry, a team of special education/mental health scholars opted to explore its preemptive nature. The research attempted to answer "Does participation in quality ECE lessen special education needs (SEN) and insulate children against requiring supports later in their school experience?" Objective: Inclusive education is now an international standard for all children and the recent Canadian bilateral agreements between the federal and provincial/territorial governments strive to increase access to ECE for all children, including those with diverse needs. How inclusive is ECE and will access lessen the amount of support required by children with identified SEN, allowing them a smoother school start and ensuring better educational outcomes? Design: An extensive review of the literature, with particular attention to longitudinal studies, was undertaken by the team. Particular attention was given to children with specific needs: those with autism spectrum disorder (ASD) who typically struggle with starting school and usually require intensive supports; and those with mental health concerns. Results: What emerges is significant, especially for the discipline of special education which traditionally views early identification and intervention as beginning at age six. By examining the impact of quality ECE with a common lens, both the ECE sector and the K-12 system obtain startling findings that pose an opportunity to develop earlier identification and intervention to alter the trajectory of the lives of vulnerable children. A continuum of evidence, from multiple studies in multiple countries, unanimously converge on the preemptive nature of ECE on SEN. Conclusion: Inclusive, high-quality ECE reduces SEN in young children and improves developmental outcomes, especially for vulnerable children and those with complex needs. The need for intervention is both removed for some children and reduced for others. Front loading interventions during the early years is wise public policy. Educators, parents, policy makers and governments could benefit from these findings.

Prevalence and Factors Associated with Pre-treatment Insomnia Symptoms in Women with Early Stage Breast Cancer

Kaitlyn Mahon

Consenting patients of family physicians participating in the CPCSSN from 2006-2011 Context: Up to 70% of post-treatment breast cancer (BCa) survivors report having insomnia symptoms, but less is known about the prevalence of insomnia in women with BCa prior to treatment initiation. Understanding the prevalence and factors associated with pre-treatment insomnia symptoms would help facilitate earlier intervention by primary healthcare providers. Objective: To identify factors associated with pre-treatment insomnia symptoms in women with early stage BCa. Design: Prospective cohort study. Setting: Speciality care. Population Studied: English-speaking women diagnosed with stage I-III BCa who were scheduled to receive primary adjuvant therapy with chemotherapy or hormone therapy. Participants had not been previously treated for cancer or already undergoing cancer treatment. Exclusion criteria included the presence of an untreated sleep disorder, besides insomnia, or another psychological

disorder that is not currently stable and would impair the ability to participate in the study. Women who scored lower than 24 on the Mini-Mental State Examination were excluded. Outcomes: The primary outcome was the presence of insomnia symptoms, defined as a score of greater than 7 on the Insomnia Severity Index. Secondary outcomes included the Hot Flash Daily Interference Scale, the Hospital Anxiety and Depression Scale and the Multidimensional Fatigue Symptom Inventory-Short Form. Results: Among 86 women with BCa, 36% reported symptoms of insomnia before beginning cancer treatment. After adjusting for age, the model was significant $F(4, 78)=4.88, p<.001$, accounting for 20% of the unique variance in insomnia severity. Zero-order correlations indicated significant bivariate associations between insomnia severity and symptoms of depression ($r=.30$), anxiety ($r=.34$), and fatigue ($r=.43$), but not perceived impairment due to hot flashes ($r=.16$). After partitioning out variability from other independent variables, only fatigue remained significantly associated with insomnia severity, accounting for 5.3% unique variance. Conclusion: Although symptoms of depression and anxiety are associated with insomnia severity, fatigue appears to be the most important factor associated with pre-treatment insomnia symptoms. Given the bi-directional relationship of insomnia and fatigue, interventions targeting one is likely to benefit the other.

Psychological Distress Scale Trajectory of Young Adults between 18-45 in Canada

Zhuoru li

Algorithm Development Populations: Psychological distress is an unpleasant subjective state, which manifests as depression and anxiety. It affects 21% of the Canadian population annually. The prevalence of psychological distress is a growing concern. The objective of this study is to identify distinct subgroups of individuals with similar mental health conditions, and the characteristics that each subgroup holds. The data was extracted from the National Population Health Survey (NPHS, 1994-2011), which is a longitudinal survey that interviews the same group of participants every two years. Latent Class Growth Modeling (LCGM) was used to identify subgroups (i.e., trajectory groups) of individuals having similar psychological distress developmental patterns over time. Multinomial logistic regression was used to identify different predictors of a trajectory group membership. This study consists of 2661 subjects with an overall age range from 18-45. We identified 4 trajectories using the LCGM method, which are (1) Distress-Free group (26.3%), (2) Low-Distress group (48.3%), (3) Moderate-Distress risk group (21%), (4) High-Distress group (4.5%). Multinomial logistic regression results showed that compared with people in the Distress-Free group, people who experienced higher financial pressures [OR: 5.776(3.473, 9.608)], lower incomes [OR: 2.063(1.235, 3.445)], chronic illnesses [OR: 2.608(1.348, 5.045)], poor overall health status [OR: 10.529(5.346, 20.738)] were more likely to fall into High-Distress groups.

'Recreational' consumer genomics: lessons from Australia for Canadian primary care

Brenda Wilson

Context: Directly purchased personal genomic tests (PGTs) are available for non-medical purposes. Popular test kits explore ancestry, 'wellness', and childhood aptitudes and traits. It is plausible that so-called 'recreational' PGTs provide medically-relevant information, and generate expectations that primary care professionals will assist in interpretation and provision of advice. Objective: To explore attitudes and experiences of users and potential users of PGTs in three domains (ancestry, personal wellness, and children's aptitudes and traits), from the perspective of implications for primary care. Design: Nine semi-structured workshops, three for each of the domains of interest. Workshops incorporated stepped, neutrally-framed information sets, with embedded pauses for facilitated discussion. We captured data using repeated tracker questions on the personal and societal acceptability of PGTs, contemporaneous unstructured written comments by participants, recording the facilitated discussions, and an end-of-workshop structured survey. Setting or Dataset: Part of the multi-component Genioz Study conducted in Australia in 2017. Population studied: Community-based participants for whom the PGT type would be relevant:

members of genealogical societies, individuals aged 18 or over recruited through social media, and parents raising school age children. Outcomes: Of 129 total participants, 23 had purchased PGTs. Tracker responses indicated that participants seemed increasingly less comfortable with the purchase of PGTs as each workshop progressed. Content analysis of discussions and written comments suggested that participants were readily able to engage with a number of ethically complex issues. The discussion data, in particular, highlighted two observations about the boundary between 'medical' and 'non-medical' uses. Firstly, several participants reported their motivation for purchasing PGTs as relating to 'unsolved' medical issues: either a continuing quest to find a 'cause' for an elusive health problem, or seeking to 'prove' the validity of their symptoms to a medical practitioner. Secondly, some participants who had purchased such tests had also downloaded their raw files and explored the data for medically relevant genetic variants, using a range of online applications. Conclusion: Purchasing any kind of PGT allows an easy and unregulated pathway to obtaining 'medical' genetic information for the curious consumer. The emerging Australian family physician experience may offer a glimpse of future developments for Canadian primary care practitioners.

Screening for Poverty And Related social determinants and intervening to improve Knowledge of and links to resources (SPARK) Study

Kris Aubrey-Bassler

Context: Numerous studies confirm the role of the social determinants across health inequities. We lack evidence to address social determinants in healthcare, and lack individual-level data to target interventions. Objective: 1) Conduct a definitive implementation study of routine sociodemographic data collection across diverse primary care settings in multiple provinces and 2) Conduct a cluster randomized control trial (RCT) to examine intervening with one key domain: poverty. This RCT will compare a "modest" vs. "intensive" intervention approach. Design: 1) Systematic Review, 2) Delphi process to achieve consensus on a Canadian socio-demographic data collection tool for primary care, 3) Pilot/implementation study, 4) Cluster RCT. Setting: Outpatient primary care practices in Ontario, Newfoundland and Labrador, Nova Scotia, Manitoba and Saskatchewan. Population: Consenting adult patients of the practices. Intervention: Sociodemographic data collection tool and a "modest" vs "intensive" intervention for patients who screen positive for poverty. Outcomes: Patient, provider, staff and leadership perspectives on addressing social needs in primary care. Access to income and other supports. Results: Implementation study is ongoing. Results pending. Conclusion: This program of research will have national and international impact, ultimately advancing the ability of health providers, organizations and systems to "go upstream" and address social determinants.

Shared Medical Appointments for Patients with Well-Controlled Diabetes in Sheshatshiu

Emily Philpott

Context: The Sheshatshiu Innu First Nation (SIFN) in central Labrador has identified diabetes care as one of their health priorities. Staff from the community's clinic have delivered Shared Medical Appointments (SMAs) for patients with well-controlled Type-II Diabetes, as an alternative to standard one-on-one care, as a means to provide more effective and culturally-appropriate care to patients in the community. Objective: The research assessed the efficacy of SMAs compared to Standard Care in terms of: 1) Improving patients' average blood glucose levels, and 2) Patient & practitioner perspectives Design: This mixed-methods study employed both a Randomized Control Trial [objective 1] and semi-structured interviews [objective 2]. Setting: Family medicine practice at the Mani Ashini Clinic in Sheshatshiu, an Innu First Nation community in Labrador; approx. 45 km from Happy Valley-Goose Bay. Intervention: Patients in the intervention group attended 6, 45-minute SMAs over 6 months at Mani Ashini Health Centre. SMAs included assessment with a physician, and educational components and discussions with Diabetic Educators, Dietitians, Community Diabetes Workers, and peers. Patients in the control group continued

with Standard Care (SC) in the form of one-on-one appointments. Population studied: 23 Innu patients with well-controlled diabetes within the practice of the primary investigator, who were between the ages of 18 to 65 and were not pregnant, participated in the study. Patients were considered to have 'well-controlled' diabetes if they had an HbA1C level below 7.5%. This represents approx. 25% of diabetic patients in the community of Sheshatshiu. 13 patients participated in SMAs [intervention group]; 10 continued with Standard Care [control group]. Dataset: Patients' hemoglobin A1C (HbA1C) were tested at the baseline, six months after intervention, and 12 months after intervention. Patients (n=13) and practitioners (n=4) who participated in the SMAs were interviewed about their perspectives on the program. Outcomes: 13 patients participated in 6 Shared Medical Appointments with other community members with Type-II Diabetes. In these appointments, up to 13 patients visited with up to 4 practitioner-experts at a time, including a physician, and partook in diabetes education and peer discussions. Patients and practitioners were then given the opportunity to share their perspectives on the suitability of SMAs for diabetes care for Innu in Sheshatshiu through the interview process. Results: There were no significant differences between the HbA1C levels of SMA patients compared to SC patients at baseline, six months or 12 months. Results of semi-structured interviews are still being assessed. Preliminary analyses of interview data suggests that both patients and practitioners believe the SMAs were a positive experience and beneficial to patients' well-being and health outcomes. Conclusion: Results suggest that the SMAs did not have significant positive or negative effect on blood sugar levels compared to Standard Care over a period of 12 months. However, the SMA model allowed practitioners to see multiple patients within a single appointment period, and allowed patients to meet with multiple practitioners in single appointment. This allowed better access for patients and increased the number of patients the physician and other practitioners could see at a time; an important consideration in a practice that serves a large number of diabetic patients, and which sees a high rate of no-shows to appointments. Full analysis of patient and practitioner interviews will provide insight as to whether or not SMAs are beneficial for patient health outcomes, and provide knowledge for both the SIFN and Labrador-Grenfell Health as to whether or not SMAs should continue in the community; and if so, ways in which they may be improved to meet the community's needs.

Skin to Skin care after Cesarean Section; What's the big deal?

Anna Corbett

Context: The Baby Friendly Initiative is a set of ten steps that obstetrical facilities should follow to promote and protect breastfeeding. Step 4 refers to the importance of immediate and uninterrupted skin to skin care (SSC) as soon as the baby is born. Although compliance with this step is high with vaginal delivery; staff have challenges implementing SSC post cesarean delivery (CD). Considering up to 40% of births may be CD; it is critically important that policies for SSC be followed post CD. A recent survey of caseroom staff reveals gaps in knowledge and attitude towards immediate and uninterrupted SSC following CD. Data reveals that skin to skin care and breastfeeding are more easily achieved when initiated first in the caseroom. Objectives: 1 To explain the benefits of skin to skin care. 2. To identify barriers of allowing skin to skin care after a caesarean section. 3 To allow staff to brainstorm ideas of how to overcome these barriers. 4 To create a positive attitude toward implementation of BFI. Design: This project is an education and quality initiative to reinforce the importance of SSC post CD and also to develop team-based multidisciplinary solutions to proposed barriers. The topic will be presented in an innovative, interactive session. Facilitated group discussion among users will create solutions to the perceived barriers to implementation. There will be an evaluation portion to the initiative. Setting or Dataset: This project will take place in the caseroom teaching room of the Health Sciences Centre. Population studied: Sessions will be held for case room nurses, NICU nurses, obstetricians, anaesthesiologists, neonatologists and respective residents. Intervention/ Program: The sessions will be given to staff involved with the mother-baby dyad. Each of these sessions will focus on the importance of SSC post CD. They will include explanations, brainstorming ways to overcome barriers.

Conclusions: It is anticipated that these sessions will improve the overall understanding and acceptance of skin to skin care and its implications for mothers and babies at this hospital. It may also lead to policy development and implementation.

Sugar babies; Best Practices to help Diabetic Mothers achieve exclusive breastfeeding

Amelia Lacey

Setting: Secondary analysis of NL data contained in the MCP Physicians Fee-For-Service Claims Data, Provincial Discharge Abstract Data, and Canadian Primary Care Sentinel Surveillance Network (CPCSSN) data **Context:** The incidence of Gestational Diabetes Mellitus (GDM) and Type 2 Diabetes in pregnancy is rising, with the rate of GDM in Newfoundland and Labrador in 2017/18 being 6.5% of all pregnancies. The Canadian Journal of Diabetes recommends exclusive breastfeeding for a minimum of four months to prevent adverse maternal and fetal outcomes; including neonatal hypoglycemia, obesity in childhood, and diabetes for both the mother and child. Despite the importance of breastfeeding for diabetic women; lower breastfeeding rates and difficulties around delayed lactation have been seen in woman with all types of diabetes in pregnancy (GDM, pre-existing, insulin-treated, or non-insulin treated). Given the high rates of diabetes in pregnancy and low rates of breastfeeding in Newfoundland and Labrador, our project is to review the literature to determine effective interventions to assist diabetic mothers in initiating and continuing breastfeeding. This first step will lead to an intervention locally to increase exclusive breastfeeding rates in diabetic mothers. **Objective:** To determine evidence-based, cost-effective interventions to improve breastfeeding outcomes in diabetic mothers. **Design:** In depth literature review and protocol development. **Population Studied:** Diabetic mothers including woman with Gestational Diabetes Mellitus (GDM), Type 1 Diabetes Mellitus (T1DM), and Type 2 Diabetes Mellitus (T2DM) **Outcomes:** This study will allow us to determine the best evidenced-based, cost effective intervention to improve exclusive breastfeeding rates among diabetic mothers. With this knowledge, we will then develop a protocol to begin an intervention trial to improve breastfeeding outcomes in diabetic women who choose to breastfeed.

The Forest Road Clinic for Adults with Developmental Disabilities: A Logic Model

Katherine Stringer

Context: Significant health care disparities exist for adults with intellectual and developmental disabilities (IDD). In Newfoundland and Labrador (NL), while the pediatric population are well care for in specialized interprofessional teams, no such support or transfer of specialized team care exists for adults with IDD in the adult health care system. The Forest Road Clinic started in 2015 to address these health disparities by supporting patients, caregivers and family physicians involved in their care. **Objective:** The objective was to identify the short and long term outcomes of this clinic to ensure continued quality improvement **Design:** This is a program description describing the various outcomes using a logic model. **Setting:** This study was set in the Ross Family Medicine Clinic - an academic family medicine clinic in St John's NL, The Forest Road clinic is one aspect of this broad scope family medicine clinic, focusing on the primary care of adults with IDD. It was developed by those involved in the clinic - 2 family physicians and a nurse practitioner in conjunctions with a research assistant. **Program:** The Forest Road clinic provides primary care consults for adult patients with IDD using the Canadian Consensus Guidelines for the Primary Care of Adults with Intellectual and Developmental Disabilities as a framework. Short term outputs for the clinic include increased interprofessional collaboration, improved patient and caregiver experience and increased awareness and interest in providing primary care for adults with IDD. Long term outcomes include interprofessional primary care team for adults with IDD, improved primary care for adults with IDD and increased competency for the primary care of adults with IDD.

The Influence of Clinic Funding on the Integration of Registered Nurses in Primary Care: A Qualitative Study from Newfoundland and Labrador

Julia Lukewich

People prescribed opiates for pain relief subsidized by the NL Prescription Drug Plan from 1999-2011 Context: Family practice nurses are Registered Nurses (RNs) who work within primary care and provide a broad range of health services. In Newfoundland and Labrador (NL), the integration of RNs into the primary care setting has progressed at a slower pace than in other jurisdictions across Canada. This role needs to be more carefully examined, as it can offer a vital solution towards addressing health system challenges and improving the quality of primary care across the province. Objective: This study aims to explore the roles of RNs in primary care settings funded by fee-for-service (FFS) and alternate payment plans (APP) in an attempt to understand the influence of funding arrangement on RN roles and activities. Design: This study employed a qualitative design. Eligible participants were questioned through semi-structured telephone interviews and asked about their experiences, current roles and activities, and barriers/facilitators to maximizing their scope of practice within the primary care setting. The interviews were recorded and transcribed verbatim and a content analysis approach was used to identify any recurring patterns or themes. Setting: Primary care. Population Studied: Primary care physicians and RNs working in a FFS or APP primary care setting in NL. Outcomes: Clinic funding played an instrumental role in the way that the RN position had originated, the way in which the team functioned, and the focus of the tasks performed by the RN. Results: In both funding arrangements, RNs work in partnership with other healthcare providers and function as generalists who provide a broad range of services. In FFS practices, RNs work in tandem with physicians and focus on one-on-one patient care in primarily office-based settings, whereas RNs in APP practices work more independently, in a wider range of settings, and with a more balanced emphasis on both individual and group-based encounters. RN roles in APP practices are determined by nursing scope of practice and community needs, while their roles are more restricted in FFS practices due to physician billing requirements. Conclusion: These findings highlight how funding arrangements can be used to optimize RNs in primary care and promote different types of team-based care within primary care settings. Understanding the relationship between funding and how RNs function within a team will inform the future integration/optimization of RNs in primary care models across Canada.

The New Refugee Health Clinic - A Logic Model

Petra Joller

Design: Validation Study Context: Since its inception in September 2015, the Refugee Health Clinic (RHC), located at the Discipline of Family Medicine (DFM), Memorial University has seen all Government Assisted Refugees (GARs) arriving locally and some Privately Sponsored Refugees (PSRs), a total of 754 new refugees. This year it is estimated that 200 GARs and 80 PSRs are expected to arrive in St John's. Currently, the RHC is coordinated and run by two DFM academic and two part-time Fee-For-Service (FFS) family physicians, who all work part time with the RHC, and one Eastern Health nurse practitioner. Under our original model all refugee patients seen by the RHC have been accepted into three of the RHC physicians' practices for indefinite ongoing primary care. This model of care has become unsustainable given the continuous influx of new refugees, resultant large practices and long wait times. A lack of support in forms of administrative support for refugee-specific needs, alternate payment models for lengthy and complex patient encounters for FFS physicians, community family physicians able to assist in looking after refugee newcomers after their adaptation to the Canadian medical system, and lack of interpretation services in the community to allow recruitment of interested family physicians to accept refugees into their practices. Objective: to review the current RHC approach to refugee healthcare and to create a Logic Model to inform the proposal of a new Refugee Health Clinic that will aim to make refugee newcomer

healthcare in St John's more inclusive and sustainable. Design: A Logic Model diagram will demonstrate the multi-dimensional functions of the RHC moving forward and to inform anticipated short-term and long-term outcomes. Setting: The Refugee Health Clinic operates at the DFM and at the LINC Association for New Canadians English Second Language School. The Logic Model will review and address healthcare delivery in both settings. Population studied: Numbers of new refugee patients seen have been reviewed, and the RHC is working with predicted numbers of new GARs and PSRs anticipated to arrive in St John's to inform the design of our future Refugee Health Clinic in our Logic Model. Outcomes: Pending - restructuring in progress. Intended outcome: improved sustainable health care services for refugee patients.

The Opioids Crisis in Newfoundland and Labrador: A qualitative study exploring the family physician perspective

Matthew Downer

Context: Opioid-related issues in communities across Newfoundland and Labrador (NL) are widely considered to be one of the top current public health concerns in the province. In particular, community-based family physicians are uniquely situated at the forefront of this public health crisis through their role in primary care. However, no work to date has qualitatively described family physicians' perspectives on opioid issues or harm reduction in NL to offer a province specific lens on this issue. Objective: Our primary objective is to explore the perspective of family physicians in NL on opioid-related issues in their communities. Further, we aimed to examine the perspective of family physicians on harm reduction in this province. Design: Qualitative study Setting/Dataset: Community-based family physicians Population Studied: Inclusion criteria included any family physician, or family medicine resident, currently practicing in a community setting in NL registered with the Newfoundland and Labrador College of Family Physicians. Outcomes: We will present preliminary findings around the major themes discussed by participants relating to key challenges surrounding opioid use in their community of practice. The key secondary outcomes that will be presented will detail the state and challenges surrounding harm reduction in their communities of practice. Results: We anticipate the results of this study will offer key insights on both opioid and harm reduction issues that family physicians consider to be paramount in their communities. This work will highlight issues specific to the impact of opioid addiction in primary care and the perspectives of clinicians in NL, and provide a platform for discussing approaches to harm reduction and improved services.

The Substance of Social Work: Critically Interrogating the 'Place' of Substance Use Education in Canadian Social Work Curriculum

Christopher Smith

Context: Although the field of social work is synonymous with substance use, most Canadian social work programs lack any form of required training in harm reduction or other applied paradigms for working with people who use drugs (PUD) in an interprofessional context. This is particularly troubling given not only the devastation wrought by the ongoing North American overdose crisis, but also the sweeping drug policy reforms that have recently taken place in Canada, including the legalization of cannabis for non-medical purposes. Objectives: Due to the uncanny parallels between the formerly disparate spheres of 'harm reduction' and social work, Canada is presently witnessing renewed interest in the ethical imperatives of social work practice in relation to the fundamental tenets of harm reduction philosophy. Conducting an inventory of the state of substance use education in social work curriculum, this project thus critically analyses 'the substance of social work' in Canada. Design, Setting Population: All accredited English-language Canadian Social Work programs were contacted, and syllabi related to substance use were collected. Analysis was performed to determine the nature and status of substance use courses (i.e. required vs. elective). Results: Given the centrality of substance use in virtually all sub-fields of social work practice, the lack

of required substance use training across Canada is alarming. Next, qualitative content analysis of substance use curriculum will reveal the prevailing ideologies regarding substance use from a social work perspective. Conclusion: Without a dramatic increase in required substance use education, Canadian social work graduates are ill-equipped for professional practice. Furthermore, given the parallels they share, incorporating harm reduction as a social work practice model is urgently required.

Trajectory of Cognitive Functions in Elderly Canadians

Yifu Liao

Patients of the Centre for Pain and Disability Management who attended or waited to attend its day program from 1999-2011; Context The prevalence of dementia has been rising among elderly populations. Dementia occurs when an elderly person loses his/her ability to remember or think. Understanding the developmental pattern of cognitive problems when ageing can be helpful in identifying the risk factors of dementia. Objectives This study aims to identify subpopulations of heterogeneous change patterns of cognitive function as well as the associated risk factors in the Canadian elderly population. Method This study includes the respondents of National Population Health Survey (NPHS) who were 55 to 75 years old at the initial circle (1994/1996) and had at least 3 records of cognition status. NPHS is a longitudinal survey conducted by Statistical Canada that followed a panel of 17,276 Canadians over 16 years to collect health and socio-demographic information every two years. Around 3000 participants were selected in this study (The specific number will be provided after the approval of Stats Canada). The latent curve growth model (LCGM) is used to model the trajectory of probability of developing cognitive problems in the Canadian elderly population and to identify subpopulations of different developmental patterns of cognitive function. LCGM is also used to summarize the long-term patterns of income, body mass index (BMI), physical activities, alcohol drink, and smoking. Logistic regression will be used to investigate the relationship between the trajectories of cognitive function and gender, education, income, and body mass index (BMI) as well as lifestyle factors. Results Three trajectories of cognitive functions have been identified. After the approval from the Statistics Canada, the details of the summary on the three subpopulations, the association of risk factors in univariate and multiple regression analysis will be provided in the presentation. Those analysis results are expected to be vetted and released by Statistics Canada at the end of May.

What is the Theoretical Domains Framework (TDF)?

Rebecca Lawrence

Context: Despite the underutilization of pre-operative tests (i.e. chest x-ray, ECG, INR, creatinine, and hemoglobin) for healthy patients undergoing low-risk surgery, as well as recommendations and guidelines from the Canadian Medical Association and Choosing Wisely Canada, provincial data shows that these tests are still being conducted on these patients. Disseminating guidelines does not appear to be enough to change clinical behaviours. Objective: This study aims to identify healthcare providers' (HCP's) perceptions on testing, as well as barriers and facilitators to reducing unnecessary pre-operative tests. Design: This is a qualitative study using semi-structured interviews and a purposeful snowballing sampling strategy. Participants: To date, participants consist of 16 HCP (anesthesiologists, surgeons and pre-admission clinic nurses) across Newfoundland that order pre-operative tests for patients. Intervention/Instrument: Interview questions were created using the Theoretical Domains Framework (TDF), a validated framework to help identify influences on HCP's behaviours. Outcome Measures: The TDF will provide a framework to conduct a deductive analysis of the transcribed interviews, coding data into relevant TDF domains. Inductive analysis will generate overarching themes within each observed domain. Results: The data is currently being coded and analyzed. To date, 16 interviews have been conducted and will continue until saturation.

Conclusion: These results will help to inform a potential intervention to improve guideline adherence in HCPs caring for healthy patients undergoing low-risk surgery. The implications of adhering to these guidelines include reducing wait times for tests, harmful exposures, costs and workload for HCP.

When TSTs and IGRAs Don't Add Up: Treating Latent TB at the MUN Refugee Health Clinic

Francoise Guigne

Context: Canadian Guidelines for Immigrant health note the risk of active Tuberculosis amongst refugees is two-fold above the immigrant population in the first year of arrival. Studies state anywhere from 64-67% of reported TB cases in Canada are amongst foreign-born individuals. Effective screening and treatment of Latent Tuberculosis infection (LTBI) amongst refugees is thus imperative. Canadian TB Guidelines recommend against routine dual screening for LTBI with Tuberculin Skin Test (TST) and Interferon Gamma Release Assay (IGRA). However, in Newfoundland and Labrador (NL) all persons arriving from countries with high prevalence of TB with a positive TST screening through Public Health are automatically screened with an IGRA. The NL TB guidelines suggest using an IGRA in cases where BCG vaccination is suspected as an IGRA is more specific for Mycoplasma Tuberculosis. The NL Regional Medical Officer of Health (RMOH) recommends treating patients for LTBI when both the TST and IGRA are positive. Studies suggest that the impact of BCG vaccination is negligible after the age of ten, when vaccinated at birth. Therefore, the RMOH recommendation may result in a patient with possible LTBI going without treatment and a higher risk of reactivation of TB in our refugee population. **Objective:** This retrospective quality improvement project seeks to assess what percentage of Government-Assisted Refugees (GARs) and Privately Sponsored Refugees (PSRs) referred to the Refugee Health Clinic (RHC) LTBI clinic have possible LTBI and are going without treatment as a result of discordant TST and IGRA testing. **Methods:** The RHC LTBI clinic started in September 2015. All patients with positive TSTs referred to the clinic are recorded in a secure database with their MCP number, IGRA and Chest X Ray results and treatment status. The percentage of patients referred between September 2015- April 2019 with negative IGRAs will be calculated from this data. **Results:** Pending. This study aims to identify the number of patients to audit for reassessment of LTBI treatment candidacy based on case by case evaluation of BCG vaccine history and risk of TB exposure. **Conclusion:** This study will help inform the NL LTBI Screening Guidelines by commenting on the frequency of TST and IGRA discord observed amongst refugee patients and the challenges that dual testing for LTBI poses when determining who to treat for LTBI.

Workshops

Choosing the appropriate study design for your question

Steve Kamper, Bethan Copsey

This course will provide a simple framework for understanding the research process and explain the important features of each stage, illustrated by examples relevant to clinical practice. It will involve a journey from the generation of a clinical question to answering it based on data from within the practice, identifying the limitations of the findings and interpreting the findings alongside published research^{4,5}. Speakers will also discuss the requirements involved in working with researchers on larger, more formal projects.

Transparency and engagement in clinical research and practice

Aidan Cashin, Mathew Bagg, Steve Kamper

Better patient care is linked with conscientious and judicious use of the best available evidence. With increasing availability of clinical research, we should be seeing improvements in the quality of care for patients in primary care, but this is not always the case. We have identified an important contributing factor, with two parts. First, clinicians do not necessarily engage with research evidence. Second, the evidence itself may not be trustworthy. This workshop aims to explore both issues to facilitate better care for patients in primary care. We will present data on contributors to effective clinician engagement with research, and new strategies centred on the ‘clinician-as-scientist’ concept. The approach reflects current initiatives from funders and research-practice partnerships that will influence the future research agenda in primary care. This will be relevant to clinicians and researchers interested in a collaborative approach to knowledge generation and implementation. Whether or not the evidence is trustworthy is a complex issue that includes how reproducible and replicable the research is. Attempts to translate poorly-performed or reported research findings into clinical practice can have serious implications for clinical care. We will present advances for clinicians to identify, evaluate and translate trustworthy research.

Using Role-Playing Games to Reach Young People about Treatment Decision Preferences

Gillian Bartlett

In this interactive workshop, we will explore the use of role-playing games to elicit treatment preferences from young people, their families and healthcare providers. A short presentation of a game developed using participatory research approaches in partnership with knowledge users will be given to explain how this example, Anthony’s game, was designed to elicit health related quality of life (HRQoL) values associated with benefits and harms for different treatment options from pediatric oncology. Anthony’s game allows children and adolescents as well as other participants to pretend to be other characters when making treatment decisions thus creating a “safe space” when decisions may conflict with societal norms (i.e. valuing quality of life over curative treatment). A facilitated discussion by a “game master” helps players reflect on the choices they made, the difficulty in deciding on appropriate treatments for many of the characters, and the possible treatments with additional pharmacogenomics information that could benefit a wider array of people than current treatments do. The game is structured on a validated measure HRQoL used in cost-benefit analyses (EQ-5D-Y) to provide information to health economists. Within this workshop we will play the game and discuss the players’ experience during the game. We will also explore other situations where it might be useful to implement the game to evaluate levels of engagement, knowledge and changes in perceived benefits care innovations in making treatment decisions. Note that players are not just patients, parents or health care providers but all members of the public and any potential stakeholders. This will a fun and informative session.



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