Patients Included

Dalhousie University

Primary Health Care Research Day

5th ANNUAL RESEARCH DAY

A Patients Included Event

#PHCRD2018

Monday, June 4, 2018
8:30 a.m. to 4:00 p.m.
Double Tree by Hilton
Lake City Ballroom
101 Wyse Road
Dartmouth, NS

Sponsored with the generous support of:

CoR-PHC
Collaborative Research in Primary Health Care

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UNITÉ DE SOUTIEN SRAP DES MARITIMES

BRIC NS
Building Research for Integrated Primary Healthcare

Strategy for Patient-Oriented Research
SPOR
Putting Patients First

Contents

Primary Health Care Research Day 2018

Overview

Monday, June 4, 2018 | 8:30 am – 4:00 pm
Double Tree by Hilton, 101 Wyse Road Dartmouth
#PHCRD2018

Unless otherwise specified, events are in the Lake City Ballroom

7:00 - 8:55am	**Registration, Poster Set-Up, and Breakfast**
7:30 - 8:30 am	**Clinician Breakfast: Practice based research in primary care: Using EMR data as a means for primary care research and quality improvement** Mathew Grandy, MD, CCFP **Note:** Separate registration is required to attend this event
9:00 - 9:05 am	**Welcome** Larry Baxter Patient Advisor, BRIC NS Ruth Martin-Misener, NP, PhD Co-Lead, CoR-PHC Professor, School of Nursing Dalhousie University
9:05 - 9:15 am	**Opening Remarks** Charmaine McPherson, RN, PhD Executive Director, Primary and Acute Care Branch - System Strategy and Performance, Nova Scotia Department of Health and Wellness
9:15 - 10:15 am	**Keynote Address: Mystery of the Blue Highway: Patient- and community-engaged practice-based research** Jack Westfall, MD, MPH Professor (Ret) of Family Medicine Founding Director, High Plains Research Network Denver, Colorado Maret Felzien, MA Associate Professor Northeastern Junior College Sterling, Colorado
10:15 - 10:30 am	**Break**
10:30 - 11:55 am	**Poster Session** Posters highlighting current primary healthcare research in Nova Scotia from patients, caregivers, healthcare providers, students, policy makers and researchers. Includes the BRIC NS Student Poster Award. Location: Harbourside Terrace

10:30 - 10:50 am	**Round Table Discussions 1** Table 1: The Patient Presence in Primary Health Care Research Larry Baxter & Kylie Peacock Table 2: Clinical Research: Challenges and Opportunities Stephanie Welton & Helena Piccinini-Vallis
11:35- 11:55 am	**Round Table Discussions 2** Table 1: An Engagement Capable Environment: What it Entails and How to Develop it Carol Fancott & Carole McDougall Table 2: Evaluating Patient and Family Advisors Involvement Elizabeth Michael & Judy Porter
11:55 am - 12:55 pm	**Lunch**
12:55 - 2:30 pm	**Presentations: Primary Healthcare Research** (concurrent) Presentations highlighting current primary healthcare research in Nova Scotia from patients, caregivers, healthcare providers, students, policy makers and researchers. Locations: MacDonald Rooms A & B 1st floor McNab Rooms A & B 2nd floor
2:30 - 2:45 pm	**BRIC NS Overview & Presentation of BRIC NS Student Award** Beverley Lawson, MSc, Director BRIC NS Network
2:45 - 3:30 pm	**Oral Presentations: Community Engagement** Three presentations related to community engagement were selected from abstract submissions.
3:30 - 3:45 pm	**Nova Scotia Health Authority Primary Health Care Update** Graeme Kohler, BSc, MA Director, Primary Health Care & Dept. of Family Practice, Central Zone, Nova Scotia Health Authority
3:45 - 4:00 pm	**Closing Remarks** Larry Baxter Patient Advisor, BRIC NS Fred Burge, MD, FCFP, MSc CoR-PHC Co-Lead Professor and Research Director Dept. of Family Medicine Dalhousie University

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Clinician Breakfast

7:30 – 8:30 am | Lake City Ballroom
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Dr. Mathew Grandy, MD, CCFP, Department of Family Medicine, Dalhousie University will lead a discussion on practice-based research in primary care, focusing on using EMR data as a means for primary care research and quality improvement. The presentation will use understanding the prevalence and practice of opioid prescribing as an example and a launching point for discussion.

7:30 – 7:35 am	**Welcome** Fred Burge, MD, FCFP, MSc CoR-PHC Co-Lead Professor and Research Director, Dept. of Family Medicine Dalhousie University
7:35 – 8:30 am	**Presentation and Facilitated Discussion** Mathew Grandy, MD, CCFP Dept. of Family Medicine, Dalhousie University

Primary Health Care Research Day 2018

Keynote Address

9:15 – 10:15 am | Lake City Ballroom
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Mystery of the Blue Highway: Patient- and community-engaged practice-based research

In this lecture, Maret Felzien and Jack Westfall will discuss their experiences in practice-based and patient/community-engaged research, specifically: what it is and what it needs. They will use examples from the High Plains Research Network and its associated Community Advisory Council.

Dr. Jack Westfall is a family physician and primary healthcare researcher. Ms. Maret Felzien is a patient who is deeply involved in research projects and in training others to do patient engaged research.

Together as a patient and PHC provider/researcher dyad and with a larger team of patients and citizens, researchers, clinicians, and decision-makers, Maret and Jack developed and deliver the Patient and Clinical Engagement (PaCE) project, which is focused on multimodal training in primary healthcare research for patient and clinician dyads; they are immersed in the business of communicating to lay audiences about research.

Further, their work in the High Plains Research Network engages with hundreds of local citizens and patients to conduct locally relevant primary healthcare research.

Dr. Westfall and Ms. Felzien also serve on the Board of Directors with North American Primary Care Research Group (NAPCRG).

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Poster Session

10:30 – 11:55 am | Harbourside Terrace
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Posters highlighting current primary healthcare research in Nova Scotia from healthcare providers, students, policy makers and researchers.

* These posters feature patient engagement

^ Building Research for Integrated Primary Healthcare (BRIC NS) is pleased to offer an award for best student poster given at Primary Healthcare Research Day. These posters are eligible for the award.

	Presenter	**Title**
1	Lisa Garland Baird	Home care case managers' integrated care of older adults with multiple chronic conditions: A scoping review
2	^Laura Miller	The relationship between physical activity and sleep among preschool-aged children
3	^Ziwa Yu	Health care experiences of Chinese international students in Nova Scotia universities: A research proposal
4	^Nicholas Humphreys	Use of point of care ultrasonography (PoCUS) in non-tertiary emergency departments in Nova Scotia
5	*Elizabeth Michael	Evaluating the involvement of patient and family advisors in quality improvement and safety teams in Nova Scotia
6	* Douglas Barre	Select administrative datasets in the Maritime provinces are rich resources for establishing intra-provincial child health profiles and birth cohorts
7	Pam Talbot	Evaluation of a needs-based, provincially-funded, insulin pump program
8	*Pam Talbot	Moving on with diabetes: transition education program for parents/caregivers of youth/young adults with diabetes
9	Michael Cardinal-Aucoin	Influence of chronotype on chronic disease prevalence in a representative Canadian family practice
10	*Nicole Doria	Sharpening the focus: Differentiating between focus groups for patient engagement vs. qualitative research
11	Nicole Doria	Creating a tool for evidence-informed health policy: Identifying the research and policy conditions that enabled the Nova Scotia Health Atlas
12	^Shanna Trenaman	Antipsychotic drug use by community dwelling older persons and adherence to STOPP criteria after a fall
13	^Joanna Mader	Bereaved family member perceptions of end-of-life care for cancer vs non-cancer cause of death
14	*Melanie Mooney	Patient centered team based care for patients
15	^Melissa Power	Above and beyond: A qualitative study of the work of nurses and care assistants in long term care
16	^Brianna Richardson	Evaluation of eHealth resources for parents of infants in the neonatal intensive care unit: A systematic review

17	^Alysia Robinson	Community variation in length of stay: An indicator of community care integration
18	Stephanie Welton	NOT-FED clinical trial: New obesity treatment fasting exercise diet
19	Stephanie Welton & Andrew Welton	Delivery volumes and perinatal outcomes at Yarmouth Regional Hospital
20	Jen Greene	Prehospital sepsis identification and impact on time to definitive treatment
21	Beverley Lawson	Using primary care electronic medical record data to identify potential need for end of life care discussions
22	^Noelle Ozog	Attitudes towards influenza vaccination in the emergency department
23	Amanda Casey	Universal design in healthcare: Barriers, facilitators and interventions
24	*^Jad Sinno	Help-seeking experiences among adults from diverse ethno-cultural backgrounds: Managing symptoms of depression, anxiety, and psychological distress in the Halifax Regional Municipality
25	Kaitlin Sibbald	Comparing the equivalence of fatigue management program formats for people with multiple sclerosis (MS): A protocol
26	*Ruth Martin-Misener	Comparative case study on primary health care performance measurement initiatives across three Canadian provinces
27	^Jaimie Carrier	A cross-jurisdictional comparison of registered nurse (RN) prescribing in primary health care in Canada
28	*^Eileen Burns	Evaluation of IBD specialty care in Nova Scotia: the referring physician perspective
29	*Ellen Withers	Opening the Door: Inviting patient and family perspectives on pediatric mental health emergencies in Nova Scotia
30	^Myles O'Brien	Nova Scotia physician perspectives on promoting and sustaining physical activity and exercise in healthcare
31	^Rachel Boyle	Homelessness and emergency department temporal utilization patterns and wait times
32	*Larry Baxter & Kylie Peacock	The patient presence in primary health care research
33	*Larry Baxter & Kylie Peacock	Patient engagement and patient-oriented research: What has BRIC-NS and MSSU been doing in Nova Scotia
34	*Fred Burge	Primary care performance measurement in Canada: Progress and next steps of the TRANSFORMATION Study
35	Flint Schwartz & Amy Bombay	Inter and intra-group differences in expressions of distress among Indigenous and Non-Indigenous adults living in the HRM
36	Alexis Goth	Systems biology: lifestyle medicine in the care of patients with ME/CFS
37	Jacqueline Gahagan	Improving pathways to trans* primary health in Nova Scotia
38	Drew Rajaraman	Multi-centre study on primary vs. tertiary care follow-up of low-risk differentiated thyroid cancer: Comparison of outcomes and costs for patients and health care systems
39	*Dayna Lee-Baggley	A 360 view: How to engage multiple stakeholders in integrating behaviour change interventions in chronic disease self-management
40	*Dominique Shephard	Improving the patient experience in the management of chronic disease by addressing emotional distress: Going where no one has gone before

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Roundtable Discussions

10:30 – 10:50 am & 11:35 – 11:55 am | Lake City Ballroom
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Running concurrently with the poster session, the Roundtable Discussions will provide an opportunity for small groups to share ideas and experiences on a variety of topics. There will be two tables per Roundtable Discussion session, each with a different topic. The intent is to keep the Roundtable Discussion groups small to foster meaningful conversations; participation will be on a first-come first-served basis.

10:30 - 10:50 am	**Round Table Discussions 1** Table 1: The Patient Presence in Primary Health Care Research Larry Baxter & Kylie Peacock Table 2: Clinical Research: Challenges and Opportunities Stephanie Welton & Helena Piccinini-Vallis
11:35- 11:55 am	**Round Table Discussions 2** Table 1: An Engagement Capable Environment: What it Entails and How to Develop it Carol Fancott & Carole McDougall Table 2: Evaluating Patient and Family Advisors Involvement Elizabeth Michael & Judy Porter

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Concurrent Oral Presentations

12:55 – 2:30 pm | MacDonald Room A & B 1st Floor, McNab Room A & B 2nd Floor
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	MacDonald Room A 1st Floor	MacDonald Room B 1st Floor	McNab Room A 2nd Floor	McNab Room B 2nd Floor
12:55 1:10	**Adrian MacKenzie** Why is the number of Nova Scotians unable to find a family doctor rising	**Yukiko Asada** Town of Troutville, where people discuss fairness issues	**Holly Mathias** Youth perceptions and experiences of access to mental health supports and services in a rural Nova Scotia community	**Pam Talbot** The key to surviving a lower extremity amputation is preventing it
1:15 1:30	**Laurie Goldsmith** Why are some transitions successful and others not? Understanding the patient perspective on transitions from temporary to permanent primary care providers	**Grace Warner** Engaging Family Advisors in a realist review to identify critical community supports in the last year of life	**Anne Mahalik** What mothers need: Recommendations to improve support of mothers with postpartum depression	**Joshua Goodwin** System-level barriers and facilitators to safe and effective opioid prescribing for chronic non-cancer pain by family physicians in nova scotia: A qualitative study
1:35 1:50	**Mary Akbari** "Getting the care I need, when I need it": Group visits empower changes in priority areas across Primary Health Care system	**Elaine Moody** Understanding the complex needs of frail older people who want to age-in-place: Mobilizing a citizen engagement committee	**Andrea Bishop** Advancing information exchange between parents and pediatric emergency and primary care providers using MyHealthNS	**Andrea Murphy** Community pharmacists and people at risk of suicide: A survey exploring stigma
1:55 2:10	**Melissa Andrew** Home visits , not a dying art?	**Michael Reid** The effect of community of residence on the risk of experiencing an unplanned repeat hospitalization	**Sydney Breneol** Improving transitions of care for complex and medically fragile children and youth	**Natalie Kennie-Kaulbach** Health care providers' views around deprescribing in Nova Scotia
2:15 2:30	**Emily Gard Marshall** Models and Access Atlas of Primary Care in Nova Scotia (MAAP-NS) Practice Profiles: An innovative approach to iterative knowledge exchange and data collection	**George Kephart** A conceptual and analytic framework for the evaluation of community-based primary health care system performance	**Barb Patterson** Improving communication, fostering a culture of quality – Use of DCPNS registry's automated reports	**Neda Alizadeh** Self-management outcome measures lack capacity to quantify all aspects of self-management important to patients: A scoping review

Primary Health Care Research Day 2018

Oral Presentations: Community Engagement

2:45 – 3:30 pm | Lake City Ballroom
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Inter and intra-group differences in expressions of distress among Indigenous and non-Indigenous adults living in the HRM

Flint Schwartz, MA, PhD Candidate
Department of Psychology and Neuroscience, Dalhousie University

This study seeks to explore: 1) how Indigenous adults express their distress through somatic versus psychological symptoms relative to non-Indigenous adults; 2) how symptom type relates to single-item mental/physical health self-ratings in both groups; and 3) whether associations vary by cultural orientation (acculturation and/or enculturation).

Improving pathways to trans primary health in Nova Scotia

Kolten MacDonell, BSc, MAHN, PDt
Health Services Manager, Primary Health Care & Dept. of Family Practice Nova Scotia Health Authority (Central Zone)

This project is meant to improve health care by specifically focusing on developing criteria-based processes and treatment strategies to reduce delays in medical care for transgender individuals in Nova Scotia (e.g., gender affirming surgeries). Our objectives include determining what are regarded as delays in receiving timely care and how best to address them from the perspectives of both trans* individuals and health care providers.

Understanding the leadership experiences of African Nova Scotian nurses

Keisha Jefferies, RN, MN, PhD Candidate
School of Nursing, Dalhousie University

This research will use Black Feminist Poststructuralism to explore the leadership experiences of African Nova Scotian nurses in health care by examining the intersections of race, class and gender. It will also expose how hegemonic ideologies result in relations of power to produce and perpetuate oppression

1) Home care case managers' integrated care of older adults with multiple chronic conditions: A scoping review

Lisa Garland Baird, Kim Fraser

Integrated-care is a multi-level strategy to improve coordination/quality of health services to meet client needs. A common feature of successful integrated-care models includes access to case-management. Currently, there is no clear description of how home care case managers (HCCM) provide integrated-care. A scoping review using Arksey & O'Malley's (2007) approach aimed to explore availability of peer-reviewed research/grey literature to describe how HCCMs provide, or do not provide, integrated-care for older adults with MCC; identify elements of integrated-care and if/how they correspond with case-management standards; identify facilitators/barriers to integrated care delivery; & propose a framework to describe how HCCMs provide integrated-care. Fourteen studies were deductively analyzed using National Case-Management Network's Canadian Standards for Practice (2009) and Valentjin et al's (2013) Conceptual Framework for Integrated-Care. Analysis identified and categorized integrated-care practice functions according to corresponding case management standards & facilitators/barriers. Findings demonstrated HCCM provide integrated-care at clinical and professional levels and all case management standards and integrated-care functions acted as facilitators and barriers, and were more likely to facilitate HCCM work. A framework describing HCCMs provision of integrated-care for this population was developed to assist with practice, policy and research recommendations for home care case-management and integrated-care of older adults with MCC.

2) The relationship between physical activity and sleep among children in the early years

Laura Miller

Introduction: Poor sleep is common among children in today's society. This is concerning as poor sleep leads to various health consequences. It is important to develop ways to promote healthy sleep in children. Among adults, physical activity is supported as a healthy sleep practice. Physical activity could be a healthy sleep practice for children but this is a gap in the literature needing to be addressed. The current study examined the relationship between physical activity and sleep among preschool children. Method: Sub-study 1: Accelerometers were used to measure physical activity and parents completed a survey to measure children's sleep. Sub-study 2: Actigraphs were used to measure sleep quantity and quality (this actigraph was worn at the same time as the accelerometer in sub-study 1). Results: Physical activity predicted sleep onset latency ($b=0.69$, $SE=0.41$, $p=0.09$) and night awakenings ($b=-1.75$, $SE=0.54$, $p<0.01$) in sub-study 1. Physical activity predicted sleep efficiency in sub-study 2 ($F(1,29)=4.37$, $b=0.36$, $p<0.05$). Conclusions: These results are meaningful as they can inform parents, teachers, health professionals and policy makers of potential methods for improving children's quality of sleep. Results can also help to inform other researchers, helping to facilitate future research of increased vigor by utilizing an experimental design.

3) Health care experiences of Chinese international students in Nova Scotia universities: A research proposal

Ziwa Yu

Chinese students constitute the largest proportion of international students in Nova Scotian universities. However, there lacks an in-depth understanding of Chinese students' health care experiences. As such, this research aims to provide a way to understand the meaning of accessing health care for Chinese international students at Nova Scotian universities. This research will use hermeneutic phenomenology to capture the day-to-day health care experiences of Chinese students. Purposive sampling will be used to recruit 8-12 Chinese students across Nova Scotian universities. Data will be collected via one-to-one conversational interviews by using a semi-structured question/interview guide. Journaling, reflexivity and attentiveness will be used to enrich and contextualize the data. Data analysis will start con-currently with data collection. Interviews will be audio-taped, transcribed verbatim and put through thematic analysis. By drawing connections between and among themes, exemplars will be created which demonstrate the common meaning of accessing health care among Chinese students. In addition, paradigm cases with rich compelling information will be identified. Understanding the health care experiences of Chinese students holds crucial implications for stakeholders to build healthier university campuses across Nova Scotia. The proposed research will inform practice change that will address the unique needs of this increasing population.

4) Use of point of care ultrasonography (PoCUS) in non-tertiary emergency departments in Nova Scotia

Nicholas Humphreys, Jock Murray

Point of Care Ultrasonography (PoCUS) has been shown to be an important adjunct to care for the Emergency Physician. Residency programs have recently begun to integrate this skillset into their training. It is not currently known to what extent this tool is being used in Nova Scotia. Two Canadian studies have looked at the use of PoCUS within rural Emergency Departments over the past 6 years. Unfortunately, there are a number of barriers to its use including lack of equipment and training. We surveyed Emergency Physicians working in non-tertiary settings in Nova Scotia on their PoCUS knowledge and use. The data were compiled and analyzed making comparison to similar studies from Ontario and Quebec. Among those surveyed, 81.8% incorporate PoCUS into their practice. Common barriers to use include lack of training and access to an ultrasound machine. The majority of respondents agreed that this was an important skill to have. Among published Canadian data, Nova Scotia has the highest proportion of Emergency Physicians who are trained in and use PoCUS. Increased training and equipment availability may be useful in increasing the number of Nova Scotian Emergency Medicine Physicians who use this tool.

5) Evaluating the involvement of patient and family advisors in quality improvement and safety teams in Nova Scotia

Elizabeth Michael, Ruth Martin-Misener, Tara Sampalli, Gail Blackmore, Fred Burge, Larry Baxter, Josée Cloutier, Brian Condran, Janet Curran, Nicole Dorian, Laura Dowling, Lynn Edwards, Graeme Kohler, Adrian MacKenzie, Heather MacLean, Emily Marshall, Kylie Peacock, Ashley Ryer, Grace Warner

Patient engagement is a fundamental principle of primary health care and a legislated requirement in the Nova Scotia Health Authority. Objective: Understand how best to involve Patient and Family Advisors so that patients have a stronger voice and meaningful impact on the primary health care system in Nova Scotia. Design: Focus groups and document analysis in a descriptive qualitative approach informed by the Strategy for Patient-Oriented Research Patient Engagement Framework and Damshroder's Consolidated Framework for Implementation Research. Setting: 7 practice settings with existing Quality Teams with embedded Patient and Family Advisors and 7 without such a team. Participants: Quality Teams, Patient and Family Advisors, clinicians. Results: Clinicians in primary health care practice settings will develop an understanding of how Patient and Family Advisors contribute to service improvement creating greater receptivity to spread of the initiative. NSHA decision makers and staff will have an improved understanding of how different settings may need different types of Patient and Family Advisors and or different amounts of involvement. Conclusions: This project provides an opportunity to strengthen the long-term integration of patient engagement approaches by connecting and measuring the success of quality improvement processes with patient engagement to other parts of the health care system.

6) Select administrative datasets in the Maritime provinces are rich resources for establishing intra-provincial child health profiles and birth cohorts

Carole Tranchant, William Montelpare, Mathieu Bélanger, Baukje Miedema, Martin Sénéchal, Danielle Bouchard, Sarah Sparks, Patricia Malinski, Caroline Jose, Linda Dalpé, Ed Barre, Misty Rossiter, Janet Bryanton, Margaret Holland, Ted McDonald

This research aims to capitalize on existing administrative data in the Maritimes to produce evidence-based knowledge on the effectiveness of early years interventions for preventing or delaying chronic diseases. The objectives are to identify and evaluate selected administrative databases (AD) from NB and PEI to create an intra-provincial Child Health Profile (CHP) and establish the foundation for a population-based birth cohort database in each province, using existing administrative data. Knowledge translation is used to facilitate the continuous involvement of parents/patients, community organizations, healthcare providers, and provincial government managers and decision-makers. Consultations were held to identify the AD of interest, validate research and practice questions, and develop a roadmap for the CHP. Not all AD identified are equally complete and accessible to researchers. Data access is challenging but feasible. Access to several healthcare AD, including the Healthy Toddler Assessment, is in progress. Based on the data currently accessible, the first CHP will focus on data at birth and at 18 months. Other databases (e.g., preschooler assessments) may be included subsequently. The CHP and birth cohort databases will enable various stakeholders to monitor and report on child health over the long term, and to evaluate current practices and future health interventions.

7) Evaluation of a needs-based, provincially-funded, insulin pump program

Pam Talbot, Margaret Dunbar, Elizabeth Cummings, Jennifer Payne

Purpose: The Nova Scotia Insulin Pump Program (NSIPP) was evaluated. Methods: Data from multiple sources were linked for 2013-2016. Results: At enrolment, 72% of enrolees were ≤18yrs and 43% were new pumpers; 47% lived in Central Zone while 69% received care there. Most enrolees met appropriate medical eligibility (ME) criteria at and post-enrolment; the exception being only 20% met their personalized A1C goal at enrolment. 99% of enrolees had ≤2 DKAs in the 12mo pre-enrolment and 100% had ≤1 DKA each year post-enrolment. A1C did not change in the first year post-enrolment, but A1C was lower for those who renewed (8.4%) versus discontinued (8.9%) coverage. By the second year, A1C was similar for both groups (8.7% and 8.8%, respectively). Few enrolees (14%) met age-specific A1C targets in the 12mo prior to enrolment; this percentage declined post-enrolment. Conclusions: Increasing capacity to provide local specialized care for the pump population is a priority. Targeted communication may be required to address the low enrolment rate among those 19+ years. The low rate of attaining age-specific A1C targets speaks to the importance of working with a specialized diabetes care team to set realistic, mutually agreed upon, personalized goals focusing on improved glycemic management.

8) Moving on with diabetes: Transition education program for parents/caregivers of youth/young adults with diabetes

Pam Talbot, Natalie Sullivan, Margaret Dunbar, Gerard Murphy

Purpose: To develop an information module that meet parents' needs by adhering to the following principles: content is needs-based, includes first-voice experiences and information about NS's transition processes and materials with a clear understanding of the parents' role throughout transition, is developed for delivery/facilitation by interested health care providers and/or parents, and encourages engagement and interaction. Methods: A 16-item telephone interview guide was developed, and interviews were conducted with 7 parents. Results: Eight themes emerged forming the basis for the information module: feelings experienced, issues and concerns about transition, questions parents have about transition, what parents need to know, what parents need to do, perceived support needs, perceived supports available, and wise words for health care providers. A two-part module and supporting resources were created. • Part 1: Awareness for parents of youth ages 13 -15; • Part 2: Facilitated session for parents of youth/young adults ages 15-18 • Supporting materials: Facilitator's guide, participant materials, slide decks, learning aids, and social media posts Conclusions: First voices of those interviewed were essential in shaping the content of our sessions. The first session was delivered in spring 2016 followed by revision. This information module was made available across NS starting in the fall of 2016.

9) Influence of chronotype on chronic disease prevalence in a representative Canadian family practice

Michael Cardinal-Aucoin, Carolyn Arbanas, Denis Wong, Muhammad Mizanur, Rashid Shuvra, Arsalan Monavvari

Chronotype, usually represented as sleep timing preferences, reflects genetically-based individual variation in circadian biology. A handful of recent evidence suggests that differences in chronotype can influence one's risk of developing certain chronic diseases, including those most commonly treated by Canadian family physicians. The association between chronotype and prevalence of chronic disease morbidity was evaluated in a representative sample population of family medicine patients. Participants, aged 18 to 65 years, completed the Munich Chronotype Questionnaire. Individuals who worked shiftwork in the last 3 months or have been diagnosed with a circadian sleep disorder were excluded. Prevalence of chronic disease was higher for late chronotypes compared to early chronotypes for participants >30 years (ANOVA p=0.03). Stepwise linear regression produced a significant equation (F=2, 131)=5.401; p=0.0061; adj. R2=0.09) to which total chronic diseases and metabolic conditions were significant contributors. Individuals with earlier chronotype had an increased proportion of metabolic conditions. These results suggest that the risk of developing chronic diseases is influenced by chronotype and that the risk of developing particular chronic disease may differ by chronotype. Understanding the contribution of chronotype to risk of chronic disease will lead to the design of personalized preventive plans and optimal management protocols in primary care.

10) Sharpening the focus: Differentiating between focus groups for patient engagement vs. qualitative research

Nicole Doria, Brian Condran, Leah Boulos, Donna Curtis Maillet., Laura Dowling, Adrian Levy

In patient-oriented research (POR), focus groups can be used as a method in both qualitative research and in patient engagement. Canadian health systems researchers and research ethics boards (REBs), however, are often unaware of the key differences to consider when using focus groups for these two distinct purposes. Further, clear guidelines on how to differentiate focus groups in patient engagement vs. qualitative research have yet to be established. To address this gap, the MSSU prepared guidelines to direct planning and conduct of focus groups for patient engagement, which are referred to as discussion groups. The MSSU has found that clarifying terminology and developing discussion group guidelines has led to improved clarity in planning research and engagement activities. The guidelines compare and contrast focus and discussion groups on the following features: theoretical frameworks; requirements for research ethics board review; identification of participants; collection and analysis of information; rigor; and considerations for disseminating results. MSSU's discussion group guidelines clarify an important distinction within POR and offer direction for Canadian health systems researchers and institutional REBs. Establishing methods for patient engagement will improve the quality of patient engagement practice and increase our collective understanding of involving patients as contributors to research planning.

11) Creating a tool for evidence-informed health policy: Identifying the research and policy conditions that enabled the Nova Scotia Health Atlas

Nicole Doria, Laura Dowling, Adrian MacKenzie

Objectives: This study sought to identify the research and policy conditions that enabled the initiation and launch of the Nova Scotia (NS) Health Atlas (healthatlas.ca), and the determinants of its creation as a tool for evidence-informed health policy-making in the province of Nova Scotia. Approach: A qualitative study design was employed to collect data from a sample of provincial health care stakeholders who were either involved in the development of the NS Health Atlas or identified as target users of the NS Health Atlas. One-on-one semi-structured interviews were conducted with 12 participants: 3 from the Government of Nova Scotia; 3 from the Nova Scotia Heath Authority; 3 health researchers; and 3 community health organization representatives. Data were coded and thematically analyzed. Results: Four themes emerged identifying the research and policy conditions that allowed for the development of the NS Health Atlas: (1) leadership, (2) collaboration, (3) culture, and (4) preceding events. Conclusion: This study documents the research and policy conditions that enabled the successful development of an evidence-informed health policy tool in a provincial context. The case of the NS Health Atlas can help inform ongoing efforts to support evidence-based decision-making in Nova Scotia and elsewhere.

12) Antipsychotic dispensations in older adults, including continuation after a fall

Shanna Trenaman, Barbara J Hill-Taylor, Kara J Matheson, David Gardner, Ingrid Sketris

Our objectives were to identify trends in antipsychotic dispensations to older Nova Scotians and adherence with the antipsychotic specific STOPP criterion that discourages antipsychotic use in persons at high risk of falling. A descriptive cross-sectional cohort study of Nova Scotia Seniors’ Pharmacare Program (NSSPP) beneficiaries ≥ 66 years with at least one antipsychotic dispensation annually from April 1, 2009 to March 31, 2014 was completed. As well, unique beneficiaries with at least one antipsychotic dispensation in the four-year period between April 1, 2009 and March 31, 2013 were linked to fall-related hospitalizations recorded in the Canadian Institute for Health Information Discharge Abstract Database. Predictors of continued antipsychotic dispensation post-discharge were evaluated. In each year 6% of eligible NSSPP beneficiaries received at least one antipsychotic dispensation. Approximately 70% of antipsychotic dispensations were for second generation agents. Of the unique beneficiaries with at least one antipsychotic dispensation in the four-year period between April 1, 2009 and March 31, 2013 who survived a fall-related hospitalization over 75% were dispensed an antipsychotic in the 100 days following hospital discharge. Antipsychotics are dispensed to approximately 6% of NSSPP beneficiaries and continued in many individuals at a high risk of falling. Future investigations are needed to inform health team, system, and policy interventions to improve concordance with this antipsychotic specific STOPP criterion when appropriate.

13) Bereaved family member perceptions of end-of-life care for cancer vs non-cancer cause of death

Joanna Mader, Beverley Lawson, Fred Burge

Background: The growing aging population and rates of chronic disease in Nova Scotia highlight the importance of patient and family centred end-of-life care. Methods: A mortality follow-back survey was used to assess patient and caregiver satisfaction with end-of-life care in Nova Scotia over a two-year period between 2009 and 2011. The unmet need associated with six patient-focused family-centred domains was assessed. In this study we examine whether the reported perceptions of bereaved family members for two of these domains, 1) attention to the needs of the family (caregivers) for, a. information and b. knowing what to expect while the decedent was dying and, 2) attention to the needs of the family (caregivers) for emotional and spiritual support, differed by whether the decedent died due to cancer. The association between cause of death and perception of unmet need was assessed using multivariate logistic regression. Results: Overall high unmet need was reported; 65.9% for emotional and spiritual support, 66.1% for knowing what to expect, and 40.3% for obtaining information. When perception of unmet need was compared for cancer vs non-cancer decedent cause of death, no significant differences were found for emotional and spiritual needs (AOR: 0.85; 95% CI: 0.64 – 1.13), knowing what to expect while the decedent was dying (AOR: 0.99; 95% CI: 0.71 – 1.37) or information needs (AOR: 1.04; 95% CI: 0.77 – 1.40)). Conclusion: The perception of unmet need of bereaved family members was not influenced by cause of death for any primary outcome. However, high rates of unmet need were identified over all categories. The involvement of a specialized palliative care program and knowing the decedent did not have long to live were associated with lower rates of unmet need among informants. We recommend that health care teams strive to identify those approaching end of life earlier in the disease trajectory for initiation of advance care planning conversations and referral of both cancer and non-cancer patients to a specialized palliative care programs. Future work should identify ways to meet the needs of caregivers at the end of life in order to improve patient and family centred care.

14) Patient centered team based care for patients

Melanie Mooney, Ruth Martin-Misener, Tara Sampalli, Larry Baxter, Fred Burge, Erin Christian, Janet Curran, Lynn Edwards, Lisa Grandy, Graeme Kohler, Adrian MacKenzie, Emily Marshall, Elizabeth Michael, Kylie Peacock, Helena Piccinini-Vallis, Ashley Ryer, Ryley Urban, Ryan MacNeil

Patient-centered approaches can increase adherence to recommended behaviours and improve patients'self-rated health. Recognizing the potential of such approaches, more interprofessional, primary care teams are being implemented. Objective: Understand perspectives of patients with multimorbidity about patient-centered care in interprofessional primary care teams. Design: Informed by the Strategy for Patient-Oriented Research Patient Engagement Framework and Damshroder's Consolidated Framework for Implementation Research, focus groups in a descriptive qualitative approach. Setting: 6 primary care practices with interprofessional teams. Participants: In each practice, 2 focus groups of 6-8 patients with multimorbidity and 1 with team members (6-8 clinicians/managers/receptionists). Results: Findings will inform the design of an intervention(s) to support the engagement of patients with multimorbidity as partners in their own care in team-based primary care practices. The research team will develop the initial design of the intervention(s). A detailed description of this 'draft' intervention will then be circulated to study participants, along with a summary of the research findings. Their input will then be used to refine the design of the intervention(s). Conclusions: Transforming to interprofessional team-based primary care offers an opportunity for more patient-centered care and improved accessibility and comprehensiveness of services and programs to meet the needs of patients with multimorbidity.

15) Above and beyond: A qualitative study of the work of nurses and care assistants in long term care

Melissa Power, Emily Gard Marshall, Nancy Edgecombe, Melissa Andrew

Introduction: As the Canadian population ages, there is a need to improve long-term care (LTC) services. An increased understanding of the positive work experiences of LTC staff may help attract more human health resources to this setting. Objective: To describe the experiences of registered nurses, licenced practical nurses and continuing care assistants working in LTC facilities. Methods: This study used qualitative data collected from a larger mixed-methods study, Care by Design. The qualitative phase of the study explored the lived experience of LTC staff from the perspectives of key stakeholders via focus groups and individual interviews. Results: Themes consistent with the literature included team collaboration and hierarchy, scope of practice, staff shortages, and residents' home, as well as a newly emerging theme of staff going "above and beyond" their clinical duties to care for residents. This above and beyond theme was categorized into subthemes including: 1. LTC facility as "family"; 2. time with residents; 3. comfort and support for families; and 4. end-of-life care. Conclusions: The findings show that staff develop a kinship with residents, demonstrate respect towards residents' families and provide comfort at the end-of-life. In emphasizing these themes of positive and fulfilling work, the present study provides insight into what motivates staff to work in LTC.

16) Evaluation of eHealth resources for parents of infants in the neonatal intensive care unit: A systematic review

Brianna Richardson, Justine Dol, Kallen Rutledge, Joelle Monaghan, Adele Orovec, Katie Howie, Taila Boates, Mike Smith, Marsha Campbell-Yeo

Introduction: Parents of preterm infants have been found to prefer seeking health information through eHealth resources (i.e. Internet, mobile apps). This research investigates the quality and credibility of eHealth resources targeted to parents of infants in the neonatal intensive care unit (NICU). Methods: Websites were systematically reviewed through Google using a search strategy combining "premature baby" plus 12 key terms (i.e. "breastfeeding") and apps through Google Play and Apple Store using 49 key terms (i.e. "preterm"). eHealth resources were review for eligibility based on predefined criteria. Websites and apps were evaluated using standardized tools to evaluate quality and credibility. Results: Initial Google search yielded 1,200 websites, of which 197 were eligible. Of those, only 9.6% of websites received a high score on overall quality and 12.2% were deemed credible using HON certification. The app search yielded 6,579 apps, of which 18 were eligible. Only 22.2% of apps received a high score on quality and 67% were deemed to have low credibility. Conclusions: Despite the number of available websites and apps for NICU parents, this evaluation revealed that current eHealth resources vary in quality and credibility. Further attention to the development of high quality resources targeted to NICU parents is needed.

17) Community variation in hospital length of stay: An indicator of community care integration

Alysia Robinson, George Kephart, Leslie Anne Campbell, Grace Warner, Pantelis Andreou, David Stock

Background/Objectives: Longer than medically necessary hospital stays are potentially harmful to patients and costly to the healthcare system. Differences in the availability, comprehensiveness, and integration of formal and informal supports at the community level may systematically support or hinder post-discharge care, consequently affecting hospital length of stay (LOS). Our aim is to estimate the extent to which community affects case-mix adjusted LOS for unplanned hospitalizations in Nova Scotia, and to determine whether certain communities stand out as having significantly higher or lower LOS than expected. Methods: This is a descriptive study employing administrative hospital discharge abstract data. The population of interest is Nova Scotian residents residing in 78 communities (defined by Forward Sortation Area), aged 30 years and older, with at least one unplanned inpatient hospitalization between 2010-2014. The outcome is adjusted LOS (ALOS), calculated as the difference between observed LOS and expected LOS. Variation in ALOS explained by community of residence is estimated using a random intercept regression model, and the small area estimates are mapped. Significance: This project contributes to community-based healthcare planning. It will assist policy makers and researchers to identify areas where hospital LOS is longer or shorter than expected.

18) NOT-FED clinical trial: New obesity treatment, fasting exercise diet

Stephanie Welton, T. O'Driscoll, R. Minty, D. Poirier, L. Kelly

Over 54% of Canadians were obese (20.2%) or overweight (33.7%) in 2014. It is important to explore treatment options that target obesity directly, not only its co-incident morbidities. Intermittent fasting is a lifestyle modification that extends the period where insulin levels are low and fat is burned rather than stored. Short-term trials implementing fasting for weight loss have had promising results. None have extended beyond six months follow-up. The NOT-FED clinical trial recommends a 16 hour fast per day, low carbohydrate diet, and 150 minutes of exercise per week to effect weight loss. Participants self-manage their diet and exercise. During 2 years of follow-up, quarterly visits are scheduled to measure weight, waist circumference, blood pressure, non-fasting lipids and glycated hemoglobin (A1c). The NOT-FED clinical trial is being carried out in Sioux Lookout Ontario, by family physicians. With over 200 participants, nearly 5% of the community has enrolled. The first 29 participants lost an average of 9.8 kg over 6 months. This weight loss exceeds the results of previous fasting trials. The size and scope of the NOT-FED trial will add new information the body of evidence on intermittent fasting and low carbohydrate diet in a community setting.

19) Delivery volumes and perinatal outcomes at Yarmouth Regional Hospital

Stephanie Welton, Andrew Welton, Karma Murphy, Joe Gillis

In rural Canada, low-risk deliveries continue to be performed by family physicians, who have many other demands on their time. Previous work has shown there is no minimum number of deliveries required to maintain competence. The current SOGC guidelines are based on this evidence, with individual practices responsible for monitoring their own physicians' ongoing competence. The Yarmouth Regional Hospital operates a prenatal clinic where four to six family physicians perform all prenatal visits and all low risk deliveries for the region (approx. 300 per year). We will determine the number of deliveries performed by each physician, and the number of adverse perinatal outcomes, over a 5 year period. Neonatal outcomes will be 5 minute Apgar score <7 and transfer to NICU or special care nursery. Maternal outcomes will include complex tears, caesarean section, postpartum hemorrhage and fever. Provincial data on the frequency of these outcomes in the whole population will be used as a benchmark. Based on previous studies, we would expect to find no relationship between low-risk delivery volume and perinatal outcomes. This study will contribute to the limited evidence on low-risk delivery volume by adding a new perspective from an exclusively rural location in Canada.

20) Prehospital sepsis identification and impact on time to definitive treatment

Jen Greene

Introduction: Sepsis is one of the highest mortality conditions in the emergency department. Early recognition coupled with prompt delivery of antimicrobials can increase survivability. Treatment guidelines for antibiotic administration within one hour are regularly unmet. As paramedics are often the first point of medical contact, they have an opportunity to impact the chain of survival for these patients with prehospital identification. We seek to describe the impact of paramedic sepsis identification on the time to antibiotics and determine the accuracy of paramedic diagnosis of sepsis compared to the emergency department (ED) physician. Methods: We will conduct a retrospective chart review of patients admitted to the ED diagnosed with sepsis. We will compare time to treatment for patients within that sample who were transported to the ED and identified as septic by paramedics, those transported and not identified as septic by paramedics and those who presented to the ED by other means. Analysis: We will present descriptive statistics on 'time of ED triage' to 'time of antibiotic administration'. We will perform a multivariate logistic regression on predictors of treatment within one hour of triage. Additionally, we will report sensitivity, specificity, positive/negative predictive values for paramedic sepsis recognition compared to ED physician.

21) Using primary care electronic medical record data to identify potential need for end of life care discussions

Beverley Lawson, Fred Burge

Context: Identifying older patients with advanced life-limiting chronic illness earlier in their disease trajectory is an essential first step in a palliative approach to facilitate delivery of high quality end-of-life [EOL] care. As the point of first and continuing contact, primary health care [PHC] providers are well positioned to identify persons who would benefit from earlier care planning discussions but require a systematic strategy to do so. Objective: To develop a validated electronic algorithm using PHC electronic medical record [EMR] information to aid PHC practice-level identification of older patients at risk of declining health and dying. Design: Retrospective cohort using Maritime Family Practice Research Network [MaRNet] EMR data from 80 community-based PHC practices in Nova Scotia. Participants: Active, living patients, aged 67 yrs+ as of: a) Development cohort: Jan 1, 2012; b) Validation cohort (VC): Jan 1, 2015. Measures: Outcome: mortality within 12 months of index date. Potential predictors: age, sex, total morbidity count, frailty indicators, total lab tests requested, abnormal lab tests, total prescriptions, total visits. Cox Proportional Hazard regression was used to predict death within 12 months. Results: DC: n=5881 (170 deaths), 69% sensitivity, 70% specificity; VC: n=5604 (252 deaths), 70% sensitivity, 68% specificity. Significant predictors: sex, age, total lab tests requested, total prescriptions, total morbidity count. Conclusion: Routinely collected EMR data can be used in a systematic way to aid PHC providers in identifying patients potentially approaching death to help enable initiation of more timely delivery of a person-centered, structured, and deliberate palliative approach to care.

22) Attitudes towards influenza vaccination during "wait times" in the emergency department (work in progress)

Noelle Ozog

The yearly influenza (flu) season is an ongoing public health challenge in Canada. Complications of the flu can lead to pneumonia, hospitalization and even death. While a flu vaccine is available free of charge, the rate of uptake in Nova Scotia (NS) is below target rates. 26% of Canadians who did not get the flu vaccine reported that they "didn't get around to it"; this presents an opportunity to combine the task of flu prevention with another health system challenge: escalating emergency department (ED) wait times. At the Queen Elizabeth II Health Sciences Centre (QEII) in Halifax, NS, average wait time is 4.6 hours. Offering the flu vaccine during this time could add value to the hours clients spend waiting in the ED, but it essential that clients and health care providers (HCPs) are approached prior to any new initiative. The proposed study is of an observational, cross-sectional design. Data will be collected via a short, anonymous questionnaires distributed to QEII ED clients and HCPs over a one month period. Following data collection, descriptive statistics will be calculated to provide meaningful data that can lay the groundwork for a program that would utilize patient "wait time" more effectively.

23) Universal design in healthcare: Barriers, facilitators and interventions

Amanda Casey

Individuals with disabilities, including many in the aging population, are impacted heavily by their surrounding built and sensory environments. Applying universal design principles ensures that a given environment or service, to the greatest extent possible, is accessible and usable by all regardless of ability level. In addition to increased mobility and safety, research suggests that the application of universal design may assist people with and without disabilities increase their physical activity levels, social engagement and communication as well as their use of community-based resources. Consequently, universal design has the ability to impact health outcomes and equity in people with various disabilities including many with mobility, cognitive, visual and/of hearing impairments. This presentation discusses trends towards universal design in healthcare plus the various barriers and facilitators for universal design in everyday sensory and built environments. Strategies for designing health promotion interventions and environments to meet the needs of all users will be discussed with the aim of improving health outcomes and services for people with and without disabilities.

24) Help-seeking experiences among adults from diverse ethno-cultural backgrounds: Managing symptoms of depression, anxiety, and psychological distress in the Halifax Regional Municipality

Jad Sinno, Flint Schwartz, Nicole Doria, Amanda Sockett, Michelle Paul, Lisa Corra, Len Burell, Zenovia Ursuliak, Ingrid Waldron, Amy Bombay

Although symptoms of depression and anxiety can affect people across cultures, in Canada levels of psychological distress are consistently higher among Aboriginal peoples relative to the general population. The limited research that exists suggests that many are pleased with treatment outcomes associated with care from various traditional and complementary practitioners, but little is known about use and satisfaction with such approaches in Nova Scotia (NS) and Canada. The following study used a large-scale mixed-methods survey to identify the experiences of people from diverse cultural backgrounds in the Halifax Regional Municipality seeking help for depression and anxiety from the conventional health care system, complimentary therapies or indigenous approaches. A total of 389 adults (280 White/European, 46 Indigenous, 39 Black, 24 'other' cultural groups) who self-identified as living with symptoms of anxiety or depression completed the survey. General practitioners, psychologists, counselors, and psychiatrists were the most commonly seen mainstream providers. Just over one-quarter of the sample reported seeing at least one complimentary provider; most commonly seen were massage therapists, naturopathic doctors, traditional Indigenous providers, and chiropractors. Ratings of satisfaction with treatment outcomes were generally higher with complimentary providers compared to mainstream providers and potential reasons for this will be discussed.

25) Comparing the equivalence of fatigue management program formats for people with multiple sclerosis (MS): A protocol

Kaitlin Sibbald

Introduction: Fatigue, one of the most common and disabling symptoms in MS and many chronic conditions, has few effective pharmacological solutions. The widely used ‘Managing Fatigue’ intervention, delivered by occupational therapists, has demonstrated effectiveness in helping people to self-manage fatigue. The traditional, out-patient, face-to-face group format creates barriers for those living in rural areas or with mobility and transportation issues. Studies demonstrating effectiveness of one-to-one, online, and teleconference formats have been conducted. However, the comparative effectiveness and non-inferiority of formats is unknown. Research Question: This PCORI funded study seeks to determine whether delivery using teleconference, online, and one-to-one formats are equally effective in improving physical, mental, and social function, and whether demographic characteristics should be used to further tailor fatigue self-management courses. Population: Adults living with multiple sclerosis, experiencing fatigue. Design: A three-arm, non-inferiority randomized control trial comparing the three methods of delivery; online delivery will be led from Nova Scotia. Significance: Results will inform widespread delivery of the ‘Managing Fatigue’ intervention to people who typically cannot access these courses due to employment demands, mobility, transportation, or geographic barriers. Availability of an online version may provide new opportunities for Nova Scotians with fatigue secondary to MS and other chronic conditions.

26) Comparative case study of primary health care performance measurement initiatives across three Canadian provinces

Ruth Martin-Misener, Sharon Johnston, Fred Burge, Stephanie Blackman, Cathy Scott, Sabrina Wong

Context: Knowledge on performance has been shown to impact primary health care (PHC) system functioning. Objective: To compare general trends in performance measurement and reporting strategies in three Canadian provinces. Design: Multiple comparative embedded case study. Setting: Cases are three comparable health regions in British Columbia, Ontario and Nova Scotia. Data sources: 1) In-depth interviews (n=19) with purposively selected key informants; 2) focus groups with patients (n=22) and clinicians (n=27); 3) published and grey literature (n=205 documents) discussing innovations in PHC settings over a 10-year period. Analysis: NVivo (v. 11) used to manage data. Content analysis to identify themes within and across cases. Results: Although all provinces identify performance measurement as important for accountability and quality improvement, actions taken to implement performance measurement vary. Of the three provinces, Ontario invested in several interprofessional and physician-based team and group models with a number of funding mechanisms. These team-based models were an important policy driver for development of performance measurement in the province. All three provinces continue to face challenges with a lack of consistent performance measurement indicators, tools and systems. Conclusions: Provinces have approached performance measurement and reporting differently and all continue to face difficulties with attaining agreement on common approaches.

27) A cross-jurisdictional comparison of registered nurse (RN) prescribing in primary health care in Canada

Registered Nurse Prescribing in Canada: Where are we now?

Jaimie Carrier

Nurse prescribing has been implemented internationally for over 20 years in response to growing demands for health care services, demographic shifts and financial pressures. Canadian provinces, including Nova Scotia, are examining opportunities for innovative healthcare delivery models that optimize the scopes of practice of existing health professionals and have a direct impact on accessibility. The objective of this study was to compare Canadian provincial legislative, regulatory and educational policies that govern and direct the implementation of RN prescribing roles. Data sources were policy documents and communications that address RN prescribing available on provincial/territorial government and regulator websites and social media. Six (BC, AB, SK, MN, ON, QC) of 13 Canadian provinces have policy to authorize RN prescribing. They vary in their choice of RN prescribing models (independent, supplementary, protocol-based) and the populations for whom RNs can prescribe. There are also differences in education and licensing requirements. There are significant variations in how RN prescribing policy is being implemented across Canada often without clear indication of the rationale for policy choices. The variations are leading to duplication of efforts for RN regulators attempting to enable prescribing in their jurisdiction.

28) Evaluation of IBD specialty care in Nova Scotia: The referring physician perspective

Eileen Burns, Courtney Heisler, Olga Kits, Sander Veldhuyzen van Zanten, Jennifer Jones

Background: The incidence and prevalence rates of Inflammatory Bowel Disease (IBD) in Canada have been observed to be amongst the highest globally, with the highest observed estimates in Nova Scotia (NS). Excessive wait times for outpatient IBD consultations is a well-documented problem. Aim: The study aim was to identify barriers in access to IBD care for referring physicians (GPs). Methods: This was a mail-out survey to GPs referring to IBD specialty care in NS. The questionnaire included sections on demographics, geographic information, referral processes, patient wait times, and referral process satisfaction. Results: A total of 145/634 surveys were returned (23%). Thirty-one percent of respondents did not have access to IBD specialty care in their community, 57% were dissatisfied with the referral process, and 41% felt the referral process was inefficient. Respondents identified the following access barriers: 1) perceived inequity in access to gastroenterologists for rural compared to urban areas, 2) need to increase number of gastroenterologists, and 3) need to create a provincial centralized referral and triage process. Conclusions: Identification of barriers to IBD specialty care can support informed system redesign, improving IBD care access, overcoming access inequities for patients and referring physicians, and ultimately improve health outcomes.

29) Opening the Door: Inviting patient and family perspectives on pediatric mental health emergencies in Nova Scotia

Ellen Withers, Leslie Anne Campbell, David Lovas

Background: Canadian youth have been presenting to emergency departments for mental health at steadily increasing rates. Canadian Emergency Departments (EDs) saw a 45% increase in mental health visits between 2006 and 2013. This trend is likely a result of several complex factors, and researcher-posed putative explanations include gaps or access problems in primary care or community-based mental health services. We recognize patients' and families' perceptions and reasons for use of the ED may differ, and to date have been underrepresented in informing research directions. Objectives: To engage youth and families to: 1) Inform research directions for paediatric ED use for mental health care; and 2) Develop ongoing patient engagement strategies. Results: Youth and families identified lack of access to mental health care in primary care settings and accessibility of the ED as areas for further research and added contextualizing information that have informed current analyses. They suggested various mechanisms for engagement and for sharing ongoing opportunities and progress which have been incorporated into our patient engagement strategy. These included providing multiple platforms for engagement, offering separate opportunities for parents and youth, and minimizing the potential for re-traumatization by ensuring appropriate supports and providing opportunities for non-verbal feedback.

30) Nova Scotia physician perspectives on promoting and sustaining physical activity and exercise in healthcare

Myles O'Brien, Chris Shields, Sandra Crowell, Olga Theou, Patrick McGrath, Jonathon Fowles

Physicians (MDs) are entrusted with providing credible health-related information. Patients who receive MD-delivered physical activity and exercise (PAE) advice increase their PAE level. Despite such benefits, MDs face challenges to discuss PAE with their patients. The purpose of this study was to ascertain MDs' opinions of what could be done to promote and sustain PAE in healthcare. MDs (n=116) across Nova Scotia completed an online self-reflection survey regarding their current PAE practices and opinions. MDs reported including PAE in 43±29% of patient appointments, provided a written exercise prescription in 13±21% of appointments, and generated 171 open-ended opinion responses. Quantitative textual analysis was performed to generate common themes. MDs most cited 'affordable community programs to refer to' (22.1% of respondents), followed by improved physician billing structure (19.8%), increased PAE education or training (18.1%), and the availability of a qualified exercise professional (16.8%). Improvements to the 'lifestyle' billing structure for Nova Scotia physicians and more continuing medical education opportunities would enhance provider-delivered physical activity counselling and exercise prescription. Community-based PAE programs, particularly those that incorporate qualified exercise professionals, will support the promotion of PAE as a primary aspect of healthcare in Nova Scotia.

31) Homelessness and emergency department temporal utilization patterns and wait times

Rachel Boyle, Swarna Weerasinghe, Samuel Campbell

Rationale: Homeless people face a higher burden of disease and more limited access to primary care, relative to the general Canadian population. Homelessness is associated with increased Emergency Department (ED) use. Knowledge of the homeless population's ED utilization and wait times can inform policy on equitable access to health care resources. Methods: This retrospective cohort study examined visits to the Halifax Infirmary ED between 2006 to 2015. Patient age, gender, and housing status; Canadian Triage and Acuity Scale (CTAS) score; and wait time for each visit were analyzed using crude rate and wait time comparisons (unpaired t-test) between homeless and housed patients. Results: Homeless ED visits rates were higher (mean 57.4+SE 2.6 per 100,000) than housed visit rates (40.2+1.6 per 100,000). Homeless people with low acuity complaints waited longer (CTAS 4: mean difference 15+SE 5 minutes and CTAS 5: 19+8 minutes) than CTAS-matched housed people. There was no difference in wait time for higher acuity complaints (CTAS 1, 2 and 3). Conclusions: The homeless population's ED utilization was higher per person and wait times for lower acuity conditions were longer than housed patients. This may reflect that homeless people have greater health needs and/or unequitable access to health care.

32) The patient presence in primary health care research

Larry Baxter, Kylie Peacock

The past two years have brought a dramatic shift in primary health care research in Nova Scotia as patient engagement became a required component of funded team projects. Guided by enthusiastic researchers and with the assistance of BRIC-NS, a few patient advocates familiar with research joined two interdisciplinary teams as full members. We will outline our experience as both a template for engaging additional patients to teams and for evaluating what has been accomplished to date. Our journey will cover: - how we got started and included on teams - what orientation was available - our experiences as patients on the two teams - the spin-offs and opportunities this experience has provided - the challenges we have faced - what we have learned about ourselves and patient engagement

33) Patient engagement and patient-oriented research: What has BRIC-NS and MSSU been doing in Nova Scotia

Larry Baxter, Kylie Peacock, Brian Condran, Sara Wuite, Beverley Lawson

Patient engagement has increasingly become a basic component of primary health care research and required by various funding programs. Research teams have been presented with new challenges and opportunities to achieve a broad spectrum of patient involvement beyond the traditional role of research subjects. These new roles range from advisers, peer researchers and full team membership as co-applicants. BRIC-NS (Building Research for Integrated Primary Healthcare) and the Maritime SPOR Support Unit (MSSU) have provided support for a number of initiatives over the past two years. These initiatives have emphasized the inclusion of the patient voice being part of all their related research projects and welcome full patient participation in project development sessions such as 'incubators,' as team members in grant applications, in the conduct of patient-oriented research projects and have initiated various patient recruitment efforts. The MSSU and BRIC- NS have made patient engagement a core part of their own operation and have emphasized building capacity among a local network of patients, researchers and other stakeholders, including public information sessions, a Maritime SPOR Summit, development of a patient registry, a three-part orientation session for team members, and a peer community of practice. These activities will be explored within the context of the Patient Engagement Framework of the Strategy for Patient Oriented Research (SPOR) and other engagement frameworks.

34) Primary care performance measurement in Canada: Progress and next steps of the TRANSFORMATION Study

Fred Burge, Sabrina Wong, Sharon Johnston, William Hogg, Ruth Martin-Misener, Jeannie Haggerty

Objectives: To highlight lessons learned from the TRANSFORMATION program of research, which advanced the science of regional-level primary care (PC) performance measurement and reporting. Approach: Mixed methods concurrent study design. Comparative policy analysis using case study methodology [document review (n=206 documents), interviews (n=20 participants), focus groups (n=44 participants)] to provide contextual data on PC innovations implemented in each study region; Deliberative dialogues (n=6 full-day sessions) to obtain patients' priorities for public PC performance reporting Linked multi-source data collection from administrative data and practice-based surveys of patients (n=1926), providers (n=117), organizational leads (n=87), and practice team members (n=449) in 87 family practices. Regional portraits to identify variation in PC performance within the Patient-Centred Medical Home (PMH) framework. Results: Key lessons learned include: 1) Linked practice-based multi-source performance measurement is feasible; 2) Electronic and automated systems for data collection can facilitate scalability; 3) Regional performance portraits identified variation; 4) Patients-citizens value the public reporting of PC performance information; 5) Regional progress towards achieving the elements of the PMH was measured and reported. Conclusion: We have advanced the methodology for comprehensive primary care performance measurement and reporting. Next steps include integrating mechanisms for scalability and comprehensiveness into our performance measurement and reporting framework.

35) Inter and intra-group differences in expressions of distress among Indigenous and Non-Indigenous adults living in the HRM

Flint Schwartz, Amy Bombay

Despite high levels of reported psychological distress in Indigenous peoples in Canada, research has not explored potential differences in expressions of psychological distress in this diverse population. This study seeks to explore: 1) how Indigenous adults express their distress through somatic versus psychological symptoms relative to non-Indigenous adults; 2) how symptom type relates to single-item mental/physical health self-ratings in both groups; and 3) whether associations vary by cultural orientation (acculturation and/or enculturation). Ongoing participant recruitment involves Indigenous and non-Indigenous adults experiencing symptoms of psychological distress, anxiety, and/or depression within the Halifax Regional Municipality. Measures include the Vancouver Index of Acculturation, the Kessler Psychological Distress Scale, single-item self-rated physical/mental health, and a demographics questionnaire (N=150). Considering the increasing Indigenous population in Canada, it is important to understand how cultural differences influence expressions of psychological distress and how individual variation in relation to engagement with traditional and mainstream cultures influence this expression. Implications for more culturally responsive mental health care and health research will be discussed.

36) Systems biology: lifestyle medicine in the care of patients with ME/CFS

Alexis Goth

More than 500,000 Canadians suffer from myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS). This condition is characterized by profound fatigue, non-restorative sleep, cognitive dysfunction, autonomic manifestations, and pain. Current research in metabolomics and systems biology is suggesting a central theme of impaired mitochondrial function, resulting in a hypometabolic state (Naviaux, 2017). The mitochondria have shifted down into a state of energy conservation, in the face of a significant trigger (toxin, stress, infection, trauma). The activity of mitochondria is central to health. They are responsible not only for energy production and regulation, but are involved in all areas of cell metabolism, including regulation of nuclear gene expression, cell signaling, triggering the inflammatory response, maintaining the ion and Ca gradient, and anti-oxidant production, etc. An Integrative Medicine paradigm is needed to accurately assess and provide treatment to this complex condition, and complex underlying principle. The target is to “nudge” mitochondria back to a state of balance. IM recognizes the whole person, is individualized, guided by evidence and draws upon all healing practices. In the awareness of a behavior change model, our goal is to offer integrative, patient-centered therapeutic lifestyle modification to patients with ME/CFS. Our outcome will assess patient function, fatigue and self-management.

37) Improving pathways to trans* primary health in Nova Scotia

Jacqueline Gahagan

Access to and use of the health system by the trans* populations has seen an increase in recent years specifically around issues such as gender dysphoria, suicidality, and general supports around health promotion and wellness care. prideHealth in Primary Health Care in collaboration with the Community Mental Health Program is involved in developing many important strategies and processes to support primary care providers to offer timely, coordinated and comprehensive care for the trans* and gender diverse populations. This project is meant to improve health care by specifically focusing on developing criteria-based processes and treatment strategies to reduce delays in medical care for transgender individuals in Nova Scotia (e.g., gender affirming surgeries). Our objectives include determining what are regarded as delays in receiving timely care and how best to address them from the perspectives of both trans* individuals and health care providers.

38) Multi-centre study on primary vs. tertiary care follow-up of low-risk differentiated thyroid cancer: comparison of outcomes and costs for patients and health care systems

Drew Rajaraman

Background: The prevalence of low-risk well-differentiated thyroid cancer (TC) is rapidly rising more than any other cancer. The outcome of these cancers has generally remained excellent. However, the extended follow-up strategy for these patients remains unclear. Some experts opt to follow them on a long-term basis while others discharge them to primary care. The relative effectiveness of these two strategies has not been studied. Methods: A multicentre Canadian study was conducted to compare the outcome of low-risk TC patients from Halifax NS/London ON, where TC patients are routinely followed by tertiary care, to Edmonton AB where patients are routinely discharged to primary care. Results: Rate of recurrence was similar in both groups being 1.1% in primary care and 1.3% in tertiary care group ($p = 0.69$). More patients in primary care (86%) than tertiary care (29.9%) consistently had TSH within the target range ($p<0.001$). The mean healthcare cost, based on a single follow-up visit with blood test and ultrasound in primary care group was CAN$ 118.01 and in the tertiary care group was CAN$ 164.12. Conclusion: Our study shows that extended follow-up of low-risk TC patients is perfectly feasible in primary care and provides significant economic benefit to the healthcare system.

39) A 360° view: How to engage multiple stakeholders in integrating behaviour change interventions in chronic disease self-management

Dayna Lee-Baggley, Michael Vallis, Jennifer Haley, Dominique Shephard, Lisa MacIsaac, Tara Sampalli, Shannon Ryan Carson, Lynn Edwards

Given the enormous cost of chronic disease, there is an urgent need for healthcare providers and healthcare systems to support chronic disease self-management. Yet few healthcare providers are trained in the behavior change skills needed to support self-management. In this presentation we review the efforts of the Behaviour Change Institute (BCI) to support training and capacity building in providers and teams in Primary Health Care in behaviour change skills. We present data from a 360 degree view of BCI training including: 1) patient perspectives on the training modules from patient engagement focus groups; 2) processes and results of assessing readiness of healthcare providers to engage in a change in clinical practice required to support chronic disease self-management; 3) the impact of manager readiness on training; 4) system-level changes required to support sustained integration of behaviour change skills in clinical practice and; 5) outcomes and feedback from healthcare providers who have taken the behaviour change training. In sum, we will present a 360 degree view of how to engage multiple stakeholders to support chronic disease self-management.

40) Improving the patient experience in the management of chronic disease by addressing emotional distress: ”Going where no one has gone before”

Dominique Shephard

Recent research by our group indicates that healthcare providers (HCPs) recognize the importance of psychological and emotional issues in chronic disease but do not feel confident in addressing them. A mixed methods approach is planned to conduct a feasibility study to assess an integrated diabetes distress intervention. This study will identify and evaluate factors influencing the implementation of this intervention so as to promote the scale-up of the intervention to a broader community of diabetes providers/centres and broader application for chronic disease management across the province. The number of patients at high risk and requiring referral to mental health is low. Results include a screening of 269 patients (151 in 2015; 118 in 2016), 84% of which were below the cut-off for likely depression. These data do not suggest that screening will either overwhelm mental health referrals, nor leave people identified without resources. It is the explicit goal of this project to empower diabetes providers to address diabetes distress within the scope of practice. It is our hope that this project will empower HCPs to incorporate distress management into chronic care interventions

Why is the number of Nova Scotians unable to find a family doctor rising?

Adrian MacKenzie, Workforce Planning, Nova Scotia Department of Health and Wellness

Background: In 2016, Nova Scotia launched a registry for people seeking a regular primary health care provider. Currently over 40,000 Nova Scotians are on the registry. Objectives: Estimate changes in 1) population size and age structure, 2) population health, 3) levels of family physician service provision, 4) the number of family physicians, and family physician 5) participation, 6) activity, and 7) rate of service provision in Nova Scotia between July 1st, 2006, and June 30th, 2016. Methods: Existing data on all seven study parameters were compiled based on an established analytical framework for needs-based health workforce planning. Data sources included provincial administrative health care databases, national population health surveys, and national surveys of physicians. Perspectives from Nova Scotians unable to find a regular family physician, practicing family physicians, and decision-makers from provincial government and health authorities were elicited to inform the analysis and interpretation of data. Results: Changes in each study parameter over time are presented, distinguishing between long-lasting, gradual trends and more recent, sudden changes. Conclusions: The identified changes have direct implications for physician and primary health care planning in Nova Scotia, and underscore the need to broaden this planning beyond single professions such as physicians.

Town of Troutville, where people discuss fairness issues

Yukiko Asada, Department of Community Health & Epidemiology, Dalhousie University

The question “What do people think?” drives many health policy public engagement efforts. Posing this question is particularly meaningful when issues relate to values, where the right answers cannot be found easily. We explored how the public engages in a reflective process to build shared consciousness about health equity. We developed Fairness Dialogues, a forum to obtain well-informed and reflective values of the public on fairness issues related to primary health care in Nova Scotia. Fairness Dialogues uses a facilitated group discussion format, employing a scenario in a fictional town, Troutville. The scenario described inequalities in life expectancy and encouraged collective, in-depth reflection regarding fairness and unfairness of these inequalities. We conducted two 1.5-2-hour discussion groups with purposively sampled 6-8 persons each. Fourteen participants varied widely in terms of age and socio-demographics. The use of the hypothetical scenario of Troutville - a typical, mid-sized town in Nova Scotia, where the participants were asked to imagine they and their families lived - was critical for the thoughtful collective exploration. In terms of examination of fairness and unfairness of health inequalities, considerations of personal and societal responsibilities for health were recurring themes in both discussion groups.

Youth perceptions and experiences of access to youth mental health supports and services in a rural Nova Scotia community

Holly Mathias, School of Health and Human Performance, Dalhousie University

There are numerous known barriers and facilitators to accessing mental health services and supports in rural communities, yet little is understood from a Nova Scotia (NS) youth perspective. How do youth living with mental health issues in a rural NS community perceive and experience barriers and facilitators of access to mental health services and supports? Seven youth were recruited from a rural NS high school and interviewed using a semi-structured guide. Interviews were transcribed and coded using ground theory. The interviewed youth identified many of the barriers and facilitators that are found in existing literature (i.e. lack of transportation and privacy). However, there appear to be new findings concerning forms of support and service location. All youths relied on their parents as a primary source of support. Few youths relied on friends because they perceived their friends as being ill-equipped to provide support. Secondly, all youths preferred to have school-based services because the location is more accessible (i.e. no transportation needed). Although some school-based services exist in the community, increased hours of operations and knowledge of the service would improve accessibility. This study adds the voices of rural NS youth to the current dialogue on access to mental health services.

The key to surviving a lower extremity amputation is preventing it

Pam Talbot, Diabetes Care Program of Nova Scotia

Purpose: The burden of lower extremity amputations (LEAs) in Nova Scotia was examined. Methods: Records from the DCPNS Registry were linked with administrative health data for 1996/97-2012/13. Results: Nearly 3,500 individuals had ≥1 LEA admissions over the period (~281/year). The LEA admission rate among those with diabetes decreased by 55%, reflecting a stable number of LEAs while the prevalence of diabetes doubled. Those with diabetes were 25x more likely to have an LEA compared to those without. Individuals with type 1 diabetes were 13 years younger than those with type 2 at the time of their first LEA; however, there was < 1 year difference in post-LEA survival between these groups. At 5-years post-LEA, 57% of those with type 1 diabetes and 48% of type 2 were alive. Conclusions: Although LEA rates are declining, LEAs continue to disproportionately affect people with diabetes. Survival post-LEA was similar regardless of diabetes type despite a younger age at presentation among those with type 1, with only half surviving 5-6 years. Primary and secondary prevention strategies are critical including early identification of high-risk feet, multidisciplinary treatment of foot ulcers, improved access to appropriate foot care/footwear, and education of healthcare professionals and persons with diabetes.

Why are some transitions successful and others not? Understanding the patient perspective on transitions from temporary to permanent primary care providers

Laurie Goldsmith, Faculty of Health Sciences, Simon Fraser University

To serve patients without a family physician and to reduce emergency department pressure to provide primary care to unattached patients, the Fraser Health Authority in British Columbia developed a nurse practitioner (NP)-run primary care clinic. This NP clinic was designed to provide interim care to unattached patients rather than replace primary care delivered by community-based family physicians. Despite establishing an expectation and process for transitioning patients to community-based family physicians, not all patients were successful in their transitions. This study investigates why some patient transitions were successful and others not. We conducted semi-structured, in-depth individual interviews with 8 patients who were discharged from the NP clinic and expected to transition to community-based family physicians. Using thematic analysis, we describe stages in various transition processes, including interim care before securing a primary care home, patient search activities, trade-offs made, and getting stuck. We also describe the demands on transitioning patients, such as emotional demands, and document multiple demand modifiers, including patient innovation, luck, and health care system support. This study adds to the nascent literature on patient transition and attachment in primary care through detailing the transition process and the various ways patients define successful and unsuccessful transitions.

Engaging family advisors in a realist review to identify critical community supports in the last year of life

Grace Warner, School of Occupational Therapy, Dalhousie University

The objective of this realist review was to partner with family caregivers and health-system representatives to inform a synthesis of the literature on how case management can connect patients nearing end of life and their family caregivers to critical informal and formal community-based services/supports to improve community-based palliative care services and delivery. Iterative phases of our realist review process have included identifying and screening the research literature, reflecting on the realist review methodology, consolidating literature into key program theories, and consulting with family caregivers and health-system partners. Literature was categorized by relevancy and key outcomes identified by key stakeholders in a Delphi process (health system representatives, family advisors, practitioners). Family caregivers' and health system representatives' team involvement has positively challenged researchers' preconceptions. Family caregivers have played an essential role in identifying critical community supports, desired outcomes and keeping the team grounded in what patients and families value and need in end-of life-care. Our goal is to provide recommendations to health-system representatives that will help support and guide the implementation of innovative community-based palliative care models.

What mothers need: Recommendations to improve support for mothers with postpartum depression

Anne Mahalik, School of Health Sciences, Dalhousie University

Background: Postpartum depression (PPD) affects a mother's ability to care for herself and her infant, however, many women have difficulty recognizing their illness and may delay or avoid seeking help. Because infants are particularly vulnerable to their mothers' (in)ability to meet the demands of their new role, it is essential that we better understand ways to improve recognition and support for mothers in need. Objective: This presentation examines what mothers who previously received treatment for PPD would recommend to provide greater support to women in the early days of motherhood. Approach: Participants must have received treatment for PPD within the past three years, and agree to participate in a personal interview. Participants' experiences were captured through qualitative descriptive inquiry and analysed thematically. Results: Fourteen mothers participated. They outlined ways to improve mothers' experience with treatment for PPD within a Nova Scotia context. Suggestions included development of community resources, alignment of physician services to mothers' needs, and adoption of appropriate policy. Conclusion: Participants expressed their desire to create a culture where stresses and failures of motherhood are acknowledged as normal, allowing mothers to be better supported through the early days of transition to their new role.

System-level barriers and facilitators to safe and effective opioid prescribing for chronic non-cancer pain by family physicians in Nova Scotia: A qualitative study

Joshua Goodwin, Faculty of Medicine, Dalhousie University

Purpose: The aim of this qualitative study was to explore what barriers and facilitators Nova Scotia (NS) Family Physicians (FPs) experience with regards to practicing effective and safe opioid prescribing for chronic non-cancer pain (CNCP). Methods: We conducted semi-structured interviews with 8 NS FPs to determine their opioid prescribing patterns, what they experience as the core issues and challenges with respect to opioid prescribing for family physicians, and what supports would be helpful to them. The interviews were audio recorded and transcribed. The transcripts were then analyzed using a grounded theory approach in the Atlas ti software to identify themes. Findings: FPs identified an intersection of challenges in prescribing opioids for CNCP that largely stem from issues relating to options available for CNCP management through the healthcare system, such as restrictive drug formulary listings, long waitlists for pain treatments and supports, and stigma toward chronic pain patients and opioid users. Several system-level facilitators to safe and effective CNCP management were described, including access to multidisciplinary healthcare teams, pain experts, and non-opioid treatments. Conclusion: This study described the challenges faced by NS FPs in treating CNCP and identifies areas of focus at the systemic level for improving safety and effectiveness of opioid prescribing.

“Getting the care I need, when I need it”: Group visits empower changes in priority areas across Primary Health Care system

Mary Akbari, Primary Health Care, Nova Scotia Health Authority
Tara Sampalli, Primary Health Care, Nova Scotia Health Authority

The “Getting the care I need, when I need it” initiative is a novel Primary Health Care (PHC) strategy to support the priority needs of patients, communities and Nova Scotians. PHC is most often the first point of contact for patients and is the backbone of our health care system. Evidence has shown Group Medical Visits are a patient-centric, feasible and cost-effective option to improve access to PHC and to address chronic disease management. By applying novel approaches and tools including patient and provider engagement strategies, LEAN techniques and validated measurement approaches, positive results are being realized. Quality improvements include increased access, satisfaction of receiving timely, relevant and continuous care, cost effectiveness and system efficiencies.

Understanding the complex needs of frail older people who want to age-in-place: Mobilizing a citizen engagement committee

Elaine Moody, Schools of Nursing and Occupational Therapy, Dalhousie University

Older people often prefer to live at home in their community as they age and experience health and functional changes. For frail older people, those who are experiencing health challenges and have a limited capacity to adapt to physiological stressors, complex supports may be needed to enable community living. This presentation outlines the development and mobilization of a citizen engagement committee to support a program of research aimed to facilitate aging in place for frail older people. The members of the committee are all present or past caregivers to frail older people with experience navigating healthcare services and community supports to enable their loved ones to live well at home. The committee draws on varied life experiences to contribute to research planning, supporting data collection and analysis, and planning for future projects. The committee has demonstrated a commitment to improve the lives of frail older people, and to supporting the development of a sustainable health and social care system that reflects the needs of a growing aging population.

Advancing information exchange between parents and pediatric emergency and primary care providers using MyHealthNS

Andrea Bishop, IWK Health Centre

Background Transitions in care between pediatric emergency departments (PEDs) and primary care (PC) are of vital importance. The recent release of the MyHealthNS personal health record (PHR) for use by all patients and clinicians in Nova Scotia is an innovative solution to improve information exchange. Objectives The objectives of this study are to: (1) explore barriers and enablers of information exchange among parents and PED and PC providers; (2) map identified provider and parent barriers and enablers onto MyHealthNS functionalities; (3) test the usability and feasibility of MyHealthNS for exchanging health information among parents and PED and PC providers. Methods Interviews with parents, PED providers, PC providers and key informants will be conducted to identify barriers and enablers of using MyHealthNS to exchange information to map against current MyHealthNS functionality. Usability and feasibility testing will then be conducted to test the major functionalities of the MyHealthNS PHR to inform implementation. Anticipated Results Findings will be used to develop a practical, evidence- and theory-informed implementation strategy that addresses identified barriers and enablers for advancing information exchange. Conclusions Understanding the functionalities, barriers and enablers of the MyHealthNS platform will provide important guidance on the use of this novel eHealth solution.

Community pharmacists and people at risk of suicide: a survey exploring stigma

Andrea Murphy, College of Pharmacy, Dalhousie University

Community pharmacists routinely interact with people at risk of suicide. Based on their role in medication therapy management, pharmacists play an important role in gatekeeping the medication supply as both prescription and non-prescription medications are frequently used in suicide attempts. There is limited information available to characterize the experiences of pharmacists in caring for people at risk of suicide. We conducted a survey of pharmacists in Australia and Canada to explore their attitudes, experiences, and stigma around caring for people at risk of suicide. The survey was self-administered, online, and available through a link hosted on Dalhousie University's Opinio site (https://surveys.dal.ca). The survey consisted of four sections: 1) consent form and demographic questions; 2) an adapted version of the Attitudes Towards Suicide scale (ATTS); 3) the Stigma of Suicide Scale Short-Form (SOSS-SF); and 4) questions regarding pharmacists' experiences with patients at risk of suicide, or who had died by suicide. Results from the surveys of 396 respondents (n=235 from pharmacists in Canada and n=161 from Australia) will be reported with a focus on stigma. Implications for practice and policy will be discussed.

Home visits – not a dying art?

Melissa Andrew, Division of Geriatric Medicine, Dalhousie University

Background: It is commonly thought that fewer and fewer primary care clinicians are offering home visits, yet evidence is lacking. We analyzed data from a survey of family physicians (FP) linked with billing records in Nova Scotia to examine provider characteristics in relation to home visits. Methods: Surveys of all (N=741) FP practicing in NS were conducted in 2014-15 and linked with administrative billing data. The FP survey had a 60% response rate; billing linkage was available for 85%. Provider characteristics included age, gender, proximity to retirement, and rural/urban practice. Results: Over 80% of surveyed FPs reported doing home visits. Among FPs who had billed for home visits in the past year, the number of visits was variable but generally low [median 18 (IQR 2,42); range 1-1265]. Older physician age ($p=0.008$), male gender ($p<0.001$) and rural practice setting ($p<0.001$) were associated with greater provision of home visits. Conclusions: The majority of FPs provide home visits. This is encouraging for the care of vulnerable older adults, and runs counter to the view that home visits are a dying art. As the population ages, strategies to support home visits will be an important area for further research and policy development.

The effect of community of residence on the risk of unplanned repeat hospitalization in Nova Scotia

Michael Reid, Department of Community Health & Epidemiology, Dalhousie University

Objective: Rates of unplanned returns to hospital following discharge are widely used as an indicator of hospital performance, but community-based primary health care systems likely play a larger role. Our objective was to estimate the effect of place of residence on patients' risk of unplanned, repeat hospitalizations (URH). Approach: Using hospital discharge data for 2010-2014, we created a statistical model which estimated how much community of residence affects the case-mix adjusted relative risk of URH overall. We then used small area estimation methods to determine which specific communities had a higher or lower than the expected adjusted risk of URH. Results: Overall, community of residence has a statistically significant effect on the case-mix adjusted risk of experiencing an URH ($p < .0001$). The adjusted risk of URH associated with living in particular communities can be larger than that of common chronic conditions. The average difference in time to an URH between communities is 16% (95%CI – 12%,21%). When mapped, communities with significantly higher or lower adjusted risks of URH are clustered in particular regions of the province. Conclusion: Community of residence can play a significant and substantial role in the risk of patients returning to hospital unexpectedly in Nova Scotia.

Improving transitions of care for complex and medically fragile children and youth

Sydney Breneol, School of Nursing, Dalhousie University

Background: Children with complex care needs are a small yet resource intensive population in our healthcare system. Our project aimed to develop recommendations for inclusion in a provincial strategy to support transitions for children with complex and medically fragile needs from the IWK Health Centre to their home community. Methods: We employed a mixed methods study design. Phase 1 incorporated multiple data sources to develop case studies documenting families' experiences transitioning from hospital to home. In phase 2, semi-structured interviews with healthcare providers were conducted to identify barriers and facilitators to successful transitions in care. Phase 3 involved a consensus meeting to discuss study findings and develop recommendations. Results: Six case studies were developed involving children and families discharged home to different communities in NS with a variety of complex care needs. Ten interviews were conducted with pediatricians, nurses, and administrators across the province. A variety of inter-institutional communication challenges were described as a barrier to the transition process. The consensus meeting resulted in six recommendations for inclusion in a provincial strategy. Conclusions: Our patient-centred approach to understanding how children and families with complex care needs navigate transitions in care provided a foundation for developing recommendations for a provincial strategy

Healthcare providers' views around deprescribing in Nova Scotia

Natalie Kennie-Kaulbach, College of Pharmacy, Dalhousie University

Objective: To describe the knowledge, attitudes, beliefs, and behaviours toward deprescribing of primary care providers (family physicians, nurse practitioners, and pharmacists) in Nova Scotia. Methods: A qualitative study was conducted utilizing 9 interviews (3 per profession) and 3 uniprofessional focus groups. Each interview and focus group was audiorecorded and transcribed verbatim. Transcript were coded independently by two researchers using the Theoretical Domains Framework version2 (TDF(v2)). Data was entered into NVivo and emergent themes were identified, including classifying these as barriers or enablers. Results: Four most frequent TDF(v2) themes coded were: 1) Social Influences; 2) Environmental Context and Resources; 3) Memory, Attention and Decision Processes; and 4) Social/Professional Role and Identity. Enablers and barriers were identified within each theme. Examples of categorization of respondent answers include: patient interest in deprescribing and collaboration with other professionals (Social Influence); time, reimbursement, and workflow (Environmental Context and Resources); descriptions of existing processes for deprescribing (Memory, Attention and Decision Making Process). Participants also perceived the importance of their role in deprescribing (Social/Professional Role and Identity), but some indicated a need to further expand this practice. Conclusions: Participants described their role in deprescribing. Key themes identified were Social Influences and Environmental Context and Resources.

Models and Access Atlas of Primary Care in Nova Scotia (MAAP-NS) Practice Profiles: An innovative approach to iterative knowledge exchange and data collection

Emily Gard Marshall, Department of Family Medicine, Dalhousie University

Objectives: 1) Share individualized, practice-relevant findings of a primary care provider census survey and administrative data linkage study with study participants. 2) Collect new data for interpretation of and comparison to original results and guide future research. Approach: With a graphic designer and a panel of primary care providers, thematic templates of Models and Access Atlas of Primary Care in Nova Scotia (MAAP-NS) findings were developed. Individualized Practice Profiles that show participants' responses alongside regional- and provincial-level results were sent to all MAAP-NS participants in a series of mailouts. Each Practice Profile was accompanied by a questionnaire relevant to the theme. Results: A mailout on accessibility was distributed in June 2017 (N=591) with a 21% (n=121) response rate. Participants accepting new patients unconditionally dropped from 9.6% in MAAP-NS (2014-15) to 3.3%. The following patient populations were more challenging to accept: require opioid prescriptions (40.5%), complex multimorbidity (28.1%), mental health concerns (29.8%), pre-natal (11.6%). Responses to why providers find certain patient populations more challenging were: lack of time, compensation, and resources/referral services; challenging patient behaviour. Conclusion: Practice Profiles allow for ongoing knowledge translation and exchange with study participants and incorporation of new survey items responsive to ongoing analysis and emergent questions.

A conceptual and analytic framework for the evaluation of community-based primary health care system performance

George Kephart, Department of Community Health & Epidemiology, Dalhousie University

Community-based primary health care is a complex adaptive system, comprised of interrelated components addressing the needs of different population segments. Evaluation and transformation of primary care systems is thus challenging. Effects of changes in one part of the system depend on the context of other parts of the system, what works in one setting may not work in another, and outcomes may vary between population segments. We propose a conceptual and analytic framework to address these challenges. Patient and system outcomes are conceived as the result of interactions between the types and complexity of healthcare problems ("complexity case-mix") in the population, and how they are addressed by the primary health care system. The complexity case-mix determines primary health care needs of the population. The degree to which the community-based primary healthcare system can address those population needs, thus mitigating poor outcomes, depends on: (1) sufficient supply, integration, and comprehensiveness of services and supports; and (2) inequities in access, quality and integration of services by level of need. Small area estimation methods, guided by this framework, provide indicators of which communities and population segments are performing well. Mixed methods research drawing on patient and family experiences provide system insights on why.

Improving communication, fostering a culture of quality – Use of DCPNS Registry's Automated Reports

Barb Patterson, Diabetes Care Program of Nova Scotia

"Diabetes care should be evidence based and supported by a clinical information system that includes electronic patient registries, clinician and patient reminders, decision support, audit and feedback". – Diabetes Canada The Diabetes Care Program of Nova Scotia Registry evolved from standardized documentation with this approach to diabetes care in mind. Diabetes Centre (DC) staff can easily generate real-time reports on their local population. DC staff succinctly convey pertinent details about a patient's progress and care plan to the primary care provider through the confidential Physician/Nurse Practitioner (NP) Report. The Physician/NP Patient List is generated by DC staff in confidence to provide primary care providers with a list of their patients seen at a given DC over a specified period along with their last recorded blood pressure, lipids, A1C, etc. DC staff use the Active/Inactive Patient Lists to identify which patients are actively followed by the DC and which ones are candidates for targeted communication. The recently enhanced Advance Indicators of Care Report is intended to assist with quality improvement initiatives and to help understand the local patient population. This report allows DC staff to generate data for quality improvement in a consistent manner, facilitating pre and post intervention evaluation.

Self management outcome measure lack capacity to quantify all aspects of self-management important to patients: A scoping review

Neda Alizadeh, Faculty of Health, Dalhousie University

Objective: Patient-reported outcome measures provide information needed by healthcare professionals who want to provide care centred on patients' needs and priorities. This scoping review examined the extent to which multi-dimensional chronic disease self-management outcome measures assess all areas important to patients. Methods: A search of four databases located 8479 articles. After screening, 28 English language, self-management tools, including 13 multi-dimensional tools, met our inclusion criteria. To assess whether subscales on the 13 tools measured areas important to patients, they were mapped, by three experienced self-management researchers, onto the Taxonomy of Everyday Self-Management Strategies (TEDSS) framework. The TEDSS framework was developed using qualitative data from patients; it has five Goal-oriented Domains focused on managing everyday life, and two Support-oriented Domains focused on problem solving and resource management. Results: No single tool evaluated all seven TEDDS domains. The most commonly measured domains were Health Behaviours and Resource Strategies. Of the 83 subscales, 45 matched the Goal-oriented Domains. Only 6 of 83 subscales matched the Activities Domain and one subscale measured the Social Interaction Domain. Conclusion: With available tools mainly focused on resource utilization and health behaviours, health providers lack capacity to distinguish and quantify all domains of self-management important to patients, indicating gaps that need to be filled.