Measuring person-centred care in the mission, vision, and core value statements of Canadian healthcare organizations

Presented by: Sadia Ahmed

All Authors: *Iqmat Iyiola1, Maria Santana1, 2, 3, Sadia Ahmed1, 2, Kimberly Manalili1, 4, Matthew Luzentales-Simpson2, Paul Fairie1, 2*
Author Affiliations: *1Alberta Strategy for Patient Oriented Research Patient Engagement Team, 2Department of Community Health Sciences, Cumming School of Medicine, 3Department of Pediatrics, Cumming School of Medicine, 4Department of Family Medicine, Cumming School of Medicine*

Background and Objectives: Person-centred care (PCC) has been shown to improve health outcomes. Since the turn of the century, the incorporation of person-centredness in care has been a growing priority for healthcare organizations. Health authorities plan and deliver healthcare across Canada. This study examines the mission, vision, and core value statements of Canadian health authorities to assess whether PCC is being included as a strategic and decision-making priority in the Canadian healthcare system.

Approach: Content analysis was performed on the mission, vision, and core value statements of 54 health authorities from the ten provinces and three territories. The statements were compiled through a review of each organization's publicly available website and policy documents.
Using the Person-Centred Care framework, developed by Santana et al. 2018, thirteen domains were identified to code for the presence of PCC: person-centred care, culturally competent care, co-designed care, compassionate care, equitable care, trusting relationship with providers, communication, coordination of care, patient involvement in decisions, timely access to provider, patient-reported outcome measures, patient experience, and affordable care.

Results: Data was collected from 54 health authorities. Four (7%) were provincial health authorities and another four were territorial health authorities. 46 (85%) organizations were regionalized health organizations.
Among the 54 health authorities included in the analysis, 53 (98%) of health authorities were found to include at least one domain of PCC in their mission, vision, and value statements.
The data identified that the three most frequent domains were compassionate care (85%), trusting relationship with providers (70%), and co-designed care (56%). Health authorities emphasized empathy and kindness in compassionate care. Trusting patient-provider relationships were characterized by respect, care, accountability, and trust. Co-designed care was described as collaboration between patients, families, and providers in the development and delivery of healthcare. There was no presence of affordable care.

Conclusion: This study describes the PCC policy landscape in Canada, by exploring whether health authorities incorporate PCC into their organizations' strategic policy. These findings can guide development of policy and elevate the standard of PCC in Canada by identifying areas that need to be addressed to improve patient experiences and outcomes.

Measurement of migraine using health administrative data in females with a recognized pregnancy: A validation study

Presented by: Carmela Melina Albanese

All Authors: *Carmela Melina Albanese1, Christine Lay2, Longdi Fu3, Hilary K. Brown1, 4, Zhiyin Li3, Susan J. Bondy1, 5*

Author Affiliations: *1Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada, 2Centre for Headache, Women's College Hospital, Toronto, Ontario, Canada, 3Institute for Clinical and Evaluative Sciences, Toronto, Ontario, Canada, 4Department of Health and Society, University of Toronto Scarborough, Toronto, Ontario, Canada, 5Dalla Lana School of Public Health, University of Toronto, Toronto, Canada*

Background and Objectives: Migraine is a brain disorder characterized by headache attacks and neurological symptoms. The prevalence of migraine is highest among reproductive-aged females, and migraine is associated with perinatal complications, showing the importance of studying migraine in pregnancy. Despite growing use of routinely collected administrative data in health research, the validity of such data to detect migraine in pregnant populations is unestablished. We validated algorithms to identify migraine among females with a pregnancy using health administrative data.

Approach: We created a population-based sample of all females in Ontario, Canada with a documented pregnancy with an estimated conception date between September 1, 2000 and December 31, 2017 and who completed the Canadian Community Health Survey (CCHS) within 5 years before conception. We used this cohort to assess the performance of algorithms using different combinations of diagnostic codes for headache disorders and migraine-specific drug claims with 2-year, 5-year, and lifetime lookback periods from conception based on agreement with self-reported migraine diagnosis from the CCHS. Sensitivity, specificity, and agreement using Cohen's kappa were calculated to examine the validity of each algorithm.

Results: The cohort comprised 55,303 females with a documented pregnancy and complete data on self-reported migraine. The prevalence of migraine using self-reported data was 17.9%, while the prevalence using administrative data varied depending on the definition (range: 2.5%-26.1%). All algorithms had high specificity (range: 79.9%-98.5%), while sensitivity varied widely (range: 7.0%-53.3%). Adding migraine-specific medications to the algorithms did not improve accuracy. The best-performing algorithm to identify migraine was ≥2 physician visits or ≥1 hospitalizations or emergency department visits with diagnostic codes ICD-9: 346/ICD-10: G43.0, with a lifetime lookback period. This algorithm had high specificity (92.2%; 95%CI 91.9-92.4) and negative predictive value (86.5%; 95%CI: 86.2%-86.8%) and modest sensitivity (34.1%; 95%CI 33.2-35.1) and positive predictive value (48.8%; 95%CI: 47.6%-50.0%). Agreement was fair (κ = 0.30; 95%CI [0.29-0.31]).

Conclusion: This study identifies algorithms to capture migraine in health administrative data, showing that these data can be used to reasonably identify pregnant women with migraine. However, sensitivity was dependent on using algorithms with long lookback periods.

What are the barriers to building healthy cities and communities: perspectives from the City of Regina, Saskatchewan

Presented by: Shanzey Ali

All Authors: *Tania Diener1, Akram Mahani2, Nazeem Muhajarine3, Joonsoo Sean Lyeo2, Chelsea Brown4, Sara Zahid2, Agnes Fung5, Shanzey Ali2, Kelly Husack6*

Author Affiliations: *1Public Health and Preventive Medicine, Saskatchewan Health Authority, 2Johnson Shoyama Graduate School of Public Policy (JSGS), University of Regina, 3Department of Community Health and Epidemiology, Faculty of Medicine, University of Saskatchewan, 4Population Health, Saskatchewan Health Authority, 5Dalla Lana School of Public Health, University of Toronto, 6REACH Edmonton Safe Council for Safe Communities*

Background and Objectives: The healthy cities approach recognizes the longstanding relationship between health and urban design, a connection acknowledged by global bodies such as WHO and United Nations. Despite a wealth of evidence supporting the impact of urban design on health, there remains a notable gap in well-researched strategies for effectively integrating health and equity into urban design. This study focused on the City of Regina to explore how health and equity intersect with urban design policies.

Approach: We used qualitative research methods, mainly semi-structured interviews, for data collection. We interviewed 30 policy- and decision-makers at the City of Regina between May and July 2023 over the video conferencing platform, Zoom. We used a combination of snowball, purposeful, and convenient sampling strategies to recruit research participants. Our research was guided the Healthy Built Environment Framework. The interview transcripts were analyzed using a qualitative thematic framework, by which the transcripts were examined for recurring patterns. The analysis employed a combination of inductive and deductive methods.

Results: Our study revealed a lack of shared understanding of health among municipal stakeholders. We identified various factors acting as either barriers or opportunities to building healthy cities. The identified opportunities include: providing a platform for equity-deserving communities to express their perspectives, opening a policy window during the COVID-19 pandemic, and the influence of champions and leadership in driving policy change. Conversely, interviewees outlined various systemic challenges including: limited accessibility to evidence, inadequate resources, a fragmented governance structure, restricted legal authority of local governments in Canada, and a prevailing culture of individualism and libertarian ideology. These barriers were deeply rooted and sustained by institutions, systems of government, or broader societal beliefs, making them resistant to change through the actions of isolated stakeholders.

Conclusion: Our findings underscore the significance of embracing a holistic approach to foster healthy and equitable urban design. As urbanization draws an increasing proportion of the global population into cities, it becomes crucial to enhance our understanding of how municipal governance can be leveraged to foster environments that promote residents' wellbeing.

Development of a framework to facilitate a data assembly plan for multi-regional research

Presented by: Ali Anis & Erica Brown & Carrie-Anne Whyte

All Authors: *Carrie-Anne Whyte1, 2, Carmen La1, 2, Data Access Support Hub (DASH) Working Group2, Jean-Francois Ethier2, 3, 4, Ali Anis1, 2, Mark McGilchrist2, 3, 4*

Author Affiliations: *1Canadian Institute For Health Information, 2Health Data Research Network Canada, 3Department of Medicine, Université de Sherbrooke, 4Groupe de recherche interdisciplinaire en informatique de la santé (GRIIS)*

Background and Objectives: Health Data Research Network Canada (HDRN Canada)'s Data Access Support Hub (DASH) provides services to facilitate multi-regional research. Before HDRN Canada, accessing data from multiple data centres in Canada was complex and burdensome to researchers. DASH is streamlining the data access process by developing a framework for specifying a project's data assembly plan (DAP), to accompany a data access request (DAR) form, to support researcher's in requesting data from multiple data centres across Canada.

Approach: HDRN Canada's network of 13 provincial/territorial and pan-Canadian data centres worked to understand the variation in processes and local requirements that exist when submitting a request for data and the development of a project DAP. A review of regional forms and processes, as well as consultations with the research community was completed to identify critical requirements for inclusion in the DAP. An iterative approach was used throughout the development of the DAP, with collaboration from DASH data centres and researchers to ensure the plan met local requirements and user needs.

Results: In April 2022, the centrally provisioned, standardized DAP form was launched. The DAP allows for specific details about a project's data requirements, cohort definition(s), data extraction(s) and analytical plan to be uniquely documented, and to ensure consistency across the DASH data centres providing data. This framework can also support the linkage of data and safeguard the quality of the results during the analytical stages of the request.

Since the launch, approximately five new projects have used the DAP, and preliminary feedback from users has been positive. Collection of user feedback is ongoing.

Conclusion: The DAP is an important step forward in streamlining the process for requesting data from multiple provinces/territories, organizations, and data sources. The DAP and other resources support researchers in undertaking multi-regional research in Canada. Further process improvements are anticipated to address user experience feedback and to promote quality research.

Tendances des taux des troubles mentaux et des troubles liés aux substances psychoactives à travers le temps: Examen provincial et régional de l'impact de la réorganisation du système de santé québécois de 2015

Presented by: Emmanuelle Arpin

All Authors: *Emmanuelle Arpin1, José Ignacio Nazif-Muñoz2, Amélie Quesnel-Vallée1*
Author Affiliations: *1McGill University, 2Université de Sherbrooke*

Background and Objectives: L'augmentation des troubles mentaux, observée depuis le début des années 2000s au Québec, signalait le besoin d'améliorer l'accès aux services de santé. L'objectif de ce projet est d'examiner l'impact de la réorganisation au système de santé et de services sociaux québécois de 2015, en tenant compte des différentes réalités régionales, et du Plan d'action en santé mentale du Québec (2015-20), sur les taux des troubles mentaux et troubles liés aux substances psychoactives.

Approach: Nous examinons les taux mensuels de diagnostics pour la population générale, ainsi que pour certaines populations vulnérables (p. ex. basé sur l'âge) à partir des données agrégées de l'Institut national de santé publique du Québec (INSPQ). La structure temporelle de la base de données, s'étalant de de 2006 à 2022, offre la possibilité d'appliquer des méthodes quasi-expérimentales, notamment des modèles chronologiques interrompus (interrupted time series). Ces méthodes permettent l'examen de l'impact de politiques à travers le temps en créant des tendances contrefactuelles. Nous estimerons l'impact global, c'est-à-dire à l'échelle de la province, et spécifique à chaque région administrative du Québec.

Results: Notre échantillon est de 3,456 observations par mois-régions (192 mois, 18 régions socio-sanitaires) des prévalences et incidences des diagnostics de dépression, d'anxiété et de troubles liés au cannabis. Nous observons une augmentation des diagnostics à travers le temps (environ 15% pour l'ensemble du Québec, pour toutes conditions confondues). Pour comprendre l'impact de la réforme, il est nécessaire d'examiner les effets de la Loi sur le cannabis (2018) et de la COVID-19 (2020) car l'effet positif pourrait être atténué par ces deux changements. Nous présenterons donc, 1) les taux avant et après la réforme de 2015, 2) les effets de facteurs socio-démographiques et ayant trait au système de santé, et 3) les effets de de la Loi sur le cannabis et de la pandémie COVID-19.

Conclusion: Les résultats permettront de mieux cerner l'impact de la plus récente réorganisation du réseau québécois de la santé, surtout en raison de la nature temporelle des données et des méthodes quasi-expérimentales qui seront employées, et soutiendront une réflexion sur l'allocation des ressources au sein du réseau québécois de la santé.

Developing the National Strategy, Vision, and Capacity for Social Workers in Primary Care

Presented by: Rachelle Ashcroft

All Authors: *Simon Lam1, Deepy Sur2, Peter Sheffield1, Fred Phelps3, Connor Kemp4, Louis-Francois Dallaire5, Jennifer Rayner6, Rachelle Ashcroft1, Keith Adamson1, Glenda Webber3*
Author Affiliations: *1University of Toronto, 2Ontario Association of Social Workers, 3Canadian Association of Social Workers, 4Association of Family Health Teams of Ontario, 5College of Family Physicians of Canada, 6Alliance for Healthier Communities*

Background and Objectives: Social workers enhance the comprehensiveness and patient-centredness of interprofessional primary care teams. However, minimal specific system-level guidance about social work's role, and training specifically targeting social workers in primary care, has been provided to date. Objectives: 1. Create the Canadian Association of Social Worker's (CASW) position and vision document to guide system-level decision-making; 2. Develop six online open-access modules for social workers and interprofessional practitioners to increase their knowledge and skills for collaborative primary care.

Approach: 1. Conducted a rapid scoping review (Arksey & O'Malley) of social work's role in primary care (Jan 1 2013 - Dec 31 2023, inclusive). Extraction elements included conditions and social issues, practice context, care modality, and in-scope tasks. 2. Identified competencies using a three-hour facilitated consensus-reaching workshop with project team, advisory committee, patient partners, and primary care experts. 3. Using a participatory engagement approach, developed six online open-access modules to advance social workers' and other interdisciplinary providers' capacity in primary care.

Results: 1. Scoping Review: 204 articles (8607 identified) were included. Social work's role in primary care included ≥18 specific tasks (e.g., counselling, educating/training, health promotion, leadership, systems navigation, team coordination), addressing ≥21 health conditions (e.g., depression, diabetes, hypertension, substance use), ≥11 specific social issues (e.g., interpersonal violence, housing, social isolation), collaboration with ≥24 professions (e.g., physicians, nurses, pharmacists, community health workers), and both in-clinic, home visit, and online care. 2. Six online learning modules - context of primary care social work, advancing health equity, assessment and treatment, using technology to improve care, evidence-based practice and quality improvement, and interprofessional education in clinical primary care settings.

Conclusion: Our demonstration of the breadth of the primary care social work role is vital for ensuring its inclusion in future primary care funding decisions and health and human resource planning. Offering collaboratively-developed training will enhance the capacity of existing and entering primary care social workers, strengthening Canadian primary care.

Leveraging an Electronic medical record-based registry to improve quality of asthma education delivery at a tertiary care center

Presented by: Michael Aw

All Authors: *Michael Aw1, Madhura Thipse2, Sumiya Lodhi1, Anne Tsampaliaros2, Dhenuka Radhakrishnan 1, 2, Nick Barrowman2, Sandra Giangioppo3, Marielena Dibartolo1, 2*
Author Affiliations: *1Faculty of Medicine, University of Ottawa , 2Children's Hospital of Eastern Ontario Research Institute, 3Schulich Faculty of Medicine, Department of Pediatrics, Western University*

Background and Objectives: Electronic medical records (EMRs) represent information-rich databanks that can support research, quality improvement and learning health systems. Asthma, affecting 15-25% of Canadian children, is associated with recurrent emergency department (ED) visits and hospitalizations. We have used the Epic-EMR at the to build a registry of children treated for asthma at a quaternary pediatric hospital. We aimed to assess the validity of the Epic-EMR asthma registry against an expert diagnosis of asthma.

Approach: We randomly selected 600 pediatric patients from the Epic-EMR if they had visited 1) ambulatory clinics, or the 2) ED between May, 2019 - April, 2020. This included 200 individuals with presumed asthma from the registry and 400 additional individuals from the larger EMR. Two blinded clinical experts (pediatric respirologists) verified the diagnosis of asthma through chart review and according to national practice guidelines; this represented the gold standard definition of asthma. We calculated positive and negative predictive values and estimated sensitivity and specificity using the method of Mercaldo.

Results: We included 598 children for analysis. The percentage agreement in asthma diagnosis amongst the reviewers ranged from 91.9% (κ=0.92) to 95% (κ=0.95). A total of 213 (36%) patients were categorized as having asthma and 385 (64%) as without asthma following expert review. The overall positive predictive value of the Epic-EMR asthma registry was 0.90 (95%CI 0.86-0.94) and the negative predictive value was 0.92 (95%CI 0.89-0.94). We estimated the overall specificity at 0.99 (95%CI 0.99-0.99) and sensitivity at 0.44 (95%CI 0.36-0.52) for capturing patients with asthma. When stratified by age, the estimated specificity and sensitivity were 0.99 (95%CI 0.99-0.99) and 0.39 (95%CI 0.29-0.49) respectively for participants aged 0 to <6 years, and 0.99 (95%CI 0.98-0.99) and 0.5 (95%CI 0.37-0.63) for participants aged 6-18 years.

Conclusion: The Epic-EMR asthma registry accurately selects pediatric patients with asthma and can be used to guide clinical care and future epidemiological research. This study supports the feasibility of using EMR-based pediatric asthma registries to foster multi-centre research using common data elements and to enable data-driven healthcare policy development.

Patient-Reported Outcome Measures to Inform Measurement-based Care for Youth Living with Mental Health Concerns: A mixed method study

Presented by: Bishnu Bajgain

All Authors*:* *Jennifer Zwicker1, Justino Mendoza2, Bishnu Bajgain1, Maria Santana3, Fariba Aghajafari4, Kalpana Thapa Bajgain3, Karen Tang4*
Author Affiliations: *1School of Public Policy, Faculty of Kinsiology, University of Calgary, 2Capella University, 3Deartment of Community Health Science, University of Calgary, 4Department of Family Medicine, University of Calgary*

Background and Objectives: Measurement-based care (MBC) describes the process of routinely using outcome measurement to guide treatment decisions supporting Patient-centered Care (PCC). Patient-reported Outcome Measures (PROMs) play a vital role in MBC supporting the delivery of PCC. Despite the evidence on the benefits of using PROMs, there remains a poor consensus on which measurements are most appropriate for youth. This study aims to inform the prioritized PROMs by patients and families/caregivers in the MBC program in Calgary, Alberta.

Approach: This mixed-methods, multi-phased study addresses some of these gaps by focusing on identifying, selecting, and prioritizing the PROMs to be implemented in the clinical care of youth living with depression and/or anxiety. The first phase of this thesis work includes three phases: 1) a systematic review, 2) Creating and combining a database of PROMs. In the third step, the top 10 PROMs were selected for prioritization in Phase 2. In Phase 2, the Nominal Group Technique (NGT) with youth living with depression and /or anxiety and their family caregivers was conducted to prioritize these top 10 PROMs.

Results: Of the 5004 articles returned by the electronic search, 34 full texts were included in this review, identified 28 PROMs. The selection process was based on criteria developed from the literature. The selected top 10 PROMs were the Beck Depression Inventory, Child Behavioral Checklist, Child Health Questionnaire, KIDSCREEN 10, Pediatric Quality of Life Inventory, Revised Children's Anxiety and Depression Scale, Spence Children's Anxiety Scale, Screen for Child Anxiety Related Disorder, Strength and Difficulties Questionnaires, and The Young Person's Core. In phase 2, the top-ranked PROMs by youth were RCAD 25, BDI, and YP-CORE, while families/caregivers were top-ranked RCAD 25, SCARED, and YP-CORE. Interestingly, for both youth and families/caregivers, the RCAD 25 and YP-CORE were the highest priorities, while CHQ was the lowest priority.

Conclusion: The findings of this study informed the MBC program at the Summit Center. Recently, AHS has launched a province-wide e-medical record system, presenting an excellent opportunity to leverage these findings to support the scale-up implementation of PROMs in clinical care for youth living with mental health in Alberta

How Mandatory Switch Policies have Influenced the Uptake of Biosimilars in British Columbia

Presented by: Nick Bansback

All Authors: *Fiona Clemont1, Mark Harrison2, Sandra Blitz3, Nick Bansback2, Mina Tadrous4, Michael Law2*
Author Affiliations: *1University of Calgary, 2University of British Columbia, 3Centre for Advancing Health Outcomes, 4University of Toronto*

Background and Objectives: In response to the low uptake of biosimilars, British Columbia (BC) in Canada became the first jurisdiction in North America to require patients with inflammatory arthritis to switch to a biosimilar in order to maintain coverage. While the impact of this policy on etanercept (ETA) and infliximab (INF) has been previously reported, this study considered the impact of the policy on adalimumab (ADA) when the biosimilar became available in 2021.

Approach: We used administrative data from British Columbia (Population Data BC) to derive a cohort of patients with inflammatory arthritis being prescribed TNF inhibitor therapy before the policies were introduced. Previously established case definitions including ICD codes were used to establish patients with different inflammatory diseases. The data included both public and private coverage since. We used descriptive statistics to analyze the trend of uptake pre and post the policy period, and a quasi-experimental interrupted time series analysis to consider the change in trends. We used interrupted time series analysis to estimate biosimilar uptake.

Results: The study identified 11,171 BC residents aged 18 years or older who were using a TNF inhibitor during the study period (01/2015-12/2021). The mean age was 54 years and 59% were female. During the first switch policy that included mandatory switches for ETA and INF in 2019, biosimilar prescriptions increased from 7.9% to 35.0% of all TNF prescriptions. After the first switch period, there was a small but consistent decline in overall biosimilar use, with an increase in golimumab and certolizumab prescriptions. During the second switch policy in 2021 which focused on adalimumab, overall biosimilar prescriptions increased from 34% to 72% of all TNF inhibitor prescriptions. In December 2021, 96.4%, 93.0% and 92.0% of prescriptions for ADA, ETA and INF respectively were biosimilar products.

Conclusion: The study findings indicate that a mandatory switch policy for biosimilar adalimumab has been as successful as the policy for infliximab and etanercept achieving high biosimilar use in British Columbia. Prior to the policy, uptake was low indicating the need for such a policy to influence change.

Analysis of coping strategies employed by nurses to face professional challenges during the COVID-19 pandemic

Presented by: Cloé Beaulieu

All Authors: *Catherine Deschênes1, Anaëlle Morin1, Cloé Beaulieu1, Christian Rochefort1, Véronique Lowry1, Marie-Eve Poitras1, Marie-Êve Perron1, Alèxe D. Tardif1*
Author Affiliations: *1Université de Sherbrooke*

Background and Objectives: Studies published before COVID-19 reveal nurses did not feel sufficiently prepared and confident to deal with a crisis. The COVID-19 crisis had a huge impact on nursing staff, forcing them to develop coping strategies to manage stress and prevent burnout. This study aimed to identify the coping strategies nurses use during the pandemic, analyze their impacts on career paths, and propose mechanisms that healthcare institutions can use to support nurses' resilience in times of crisis.

Approach: We conducted a qualitative study using the experience mapping approach to map out the stages of nurses' career paths, the impacts of the pandemic on them, and the determinants that influenced them. An inductive and deductive analysis method was used to identify nurses' coping strategies for the pandemic. The impact of coping strategies on career paths was analyzed with Lazarus and Folkman's Transactional Model of Stress and Coping. The results were presented to the Canadian Knowledge User Committee to generate recommendations for healthcare institutions to promote nurse retention and better occupational health.

Results: Two interviewers conducted 74 semi-structured individual interviews lasting an average of 1,5 hours. The preliminary results show that coping strategies vary greatly among the nurses depending on the coping resources (personality, professional background), the environmental constraints of the sanitary measures (workload, confinement) and between career paths (keeping the same position, voluntary or forced shift change, resignations). The nurses reported that the pandemic was stressful, but positive coping strategies improved their resilience at work. Problem-based coping was mostly involved in the fight against COVID-19 (working in the hot zone, complying with measures, and seeking information). Emotion-based coping strategies included seeking social support, avoidance and hobbies. We also observed negatives coping like excessive workload, emotional numbing or not using coping strategies at all.

Conclusion: This study will provide a better understand of how nurses deal with stress during a crisis and how it can affect their career paths. Results will help Canadian healthcare institutions use concrete solutions and mechanisms to support nurses during a crisis. Recommendations will be formulated and disseminated to various audiences.

2023 Canadian Survey of Nurses: Use of Digital Health Technology in Practice

Presented by: Waldo Beausejour

All Authors: *Waldo Beausejour1*
Author Affiliations: *1Canada Health Infoway*

Background and Objectives: Nurses account for a large proportion of the healthcare workforce in Canada. The Canadian Survey of Nurses is triennial cross-sectional survey that tracks the adoption and impact of digital health technologies on nursing practice. It provides insights into the ability of Canadian nurses' ability to exchange clinical summaries with other health providers and their perceptions of artificial technology (AI) integration in healthcare. Nurses from diverse nursing domains and designations are surveyed across provinces and territories.

Approach: The survey was conducted in 2014, 2017, 2020 and most recently in 2023. The last iteration collected data online from a representative sample of 1,907 nurses, of whom 1,283 nurses were providing direct patient care. The online questionnaire was distributed to the members of the Canadian Nursing Association (CNA) and the Canadian Nursing Informatics Association, and nurses practicing in Canada. Field work was completed between October and December 2023. The results were statistically weighted using the latest workforce data from the Canadian Institute for Health Information (CIHI) to ensure representation across demographic groups.

Results: The results of the survey will be published in March 2024. The population of interest consists of regulated nursing professionals practicing in Canada in different health care settings and from different domains of nursing practice, with a focus on nurses in direct patient care and the evolution of digital health technologies integration in nursing practice. A trend analysis will offer insights into the use of electronic medical record (EMR) systems and access to electronic health records (EHR) by nurses with early data suggesting significant increases in both of those indicators since the last survey in 2020. It will highlight the current landscape of the electronic exchange of patients' clinical summaries between nurses and other health care providers and the integration of AI in nursing practice.

Conclusion: The 2023 Canadian Survey of Nurses delves into the evolving landscape of digital health technology adoption. With the digitalization of the Canadian health care system, nurses are well positioned to benefits from these initiatives. The survey will shed light on how adoption of these technologies impact nursing practice and workflow.

Organizational interventions to support and promote the mental health of health care workers during pandemics and epidemics: A systematic review

Presented by: Emily Belita

All Authors: *Fangwen Zhao1, Maureen Dobbins2, Laura Banfield1, Emily Belita2, Sheila Boamah2, Jason Cabaj3, Carolyn Seale2, Gaynor Watson-Creed4, Susan Jack2, Cordell Neudorf5, Clemence Ongolo Zogo6, Sarah Neil-Sztramko7*
Author Affiliations: *1McMaster University, 2McMaster University School of Nursing, 3University of Calgary, Cumming School of Medicine, 4Dalhousie University School of Medicine, 5University of Saskatchewan College of Medicine, 6University of Toronto, 7Department of Health Research methods, Evidence, and Impact, McMaster University*

Background and Objectives: Abundant evidence indicates that public health crises like COVID-19 amplify mental health risks for frontline healthcare workers. Systematic reviews show that burnout and other disorders are prevalent among healthcare workers in challenging conditions. While individual-level interventions have been associated with alleviating mental health issues, evidence is meager regarding effectiveness of organizational-level strategies. This review will identify workplace factors that improve mental health outcomes for public health workers, while providing targeted information regarding policy and practice.

Approach: In conducting the systematic review, eight scientific databases were searched from inception to January 2023. Eligible studies described testing organizational strategies/interventions promoting mental health outcomes for frontline healthcare workers during a pandemic. Independent reviewers screened results by titles and abstracts, extracted data, and assessed the quality of studies using criteria of the Joanna Briggs Institute, resolving discrepancies through discussion and arbitration. Strategies and interventions were coded according to the characteristics of the Job Demands-Resources model. Results were presented in a narrative synthesis due to the heterogeneity of studies' characteristics.

Results: Reviewers screened 10995 unique articles, with 86 studies (representing n=133,088 participants) included in the review. The majority (n=70) were cross-sectional studies, although there was marked diversity regarding participants, job role, location, strategies, outcome measures, and level of quality. Results suggested that certain factors/strategies pertaining to a supportive practice environment (positive work culture, supportive leadership, flexible scheduling) and to organizational resources (sufficient material resources, training opportunities) could alleviate mental health outcomes like burnout, anxiety, and depression. Workplace demands like increased workloads or challenging schedules/shift type could exacerbate these outcomes and others including post-traumatic stress disorder, fatigue, stress, and insomnia.

Conclusion: While adverse mental health outcomes are prevalent in healthcare workers during public health crises, certain organizational-level actors/strategies may improve mental health outcomes of healthcare workers. While study heterogeneity must be considered when interpreting results, this synthesis identifies avenues for future research

Examining the health care use differences between the first and second year of the COVID-19 pandemic among patients receiving palliative care who are frequent users of emergency department services: A cohort study

Presented by: Bhavneet Bhangu

All Authors: *Bhavneet Bhangu1, Kelly Cimek2, Jean-Eric Tarride1, Iwona Bielska1, Harmanvir Dhaliwal1*
Author Affiliations: *1McMaster University, 2Ontario Health*

Background and Objectives: With the emergence of the pandemic leading to rising health care needs, community-based services were unable to meet the local population requirements. This led to patients becoming reliant on the emergency department (ED). As such, this study aims to examine changes in the characteristics and patterns of health care use among patients receiving palliative care who experienced high ED use over the course of the pandemic to reduce healthcare burden and foster community health.

Approach: Using the Integrated Decision Support database, patients receiving palliative care who were high ED users (5+ ED visits) and resided in southern Ontario were identified. Data were compiled for both the 2020/21 and 2021/22 fiscal years, including information on demographics, home care status, ambulance use, and hospitalization characteristics among these patients.

Results: During the 2020/21 fiscal year, 662 patients receiving palliative care were found to have high ED use, averaging 7 visits per individual (IQR: 2, range: 5-39) of which 46% of the visits resulted in hospitalization. 52% of these visits were ambulance arrivals (SD: 3, median: 4, IQR: 2, range: 1-34). During the 2022/22 fiscal year, this number rose to 55% (SD, median, IQR: 3,range: 0-17). 542 patients receiving palliative care were high ED users, averaging 7 visits per patient (IQR: 2, Range 5-28) of which 45% of the visits resulted in hospitalization. 88% (n=582) of these patients were receiving home care services while 98% (n=650) had a primary care physician. These values slightly dropped during the following year to 82% (n=445) and 97% (n=526), respectively.

Conclusion: The percentage of patients who used community services declined into the second year of the pandemic despite the constant evolving of policies, indicating the need for better examination of the effectiveness of practices informing accessibility in the health care system at the community level during times of infectious disease outbreaks.

Piloting the EQ-5D PROMs tool within a subset of Ontario Community Health Centres

Presented by: Sara Bhatti

All Authors*:* *sara bhatti1*
Author Affiliations: *1alliance for healthier communities*

Background and Objectives: The Alliance for Healthier Communities (Alliance) is currently piloting the EQ-5D patient reported outcome measures (PROMs) tool in a subset of Community Health Centres (CHCs). The goal of this project is to investigate if the integration of the tool helps support collaborative care planning and program evaluation.

Approach: Participating CHCs were given the option to select one of four implementation scenarios, these included embedding the tool within a clinical encounter, new patient intake, program evaluation and/or CPIN (Canadian Primary Care Information Network - a digital patient engagement tool to send short text or email messages to patients as well as collection PROMs through linked surveys). An implementation evaluation will be conducted with data sources including a pre-implementation survey to capture site characteristics, qualitative interviews with patients and providers, electronic medical record data (e.g. utilization and sociodemographic data) as well as a post-implementation survey.

Results: The evaluation of pilot project will describe how each participating centre implemented the tool including facilitators and barriers, and both patient and provider experiences with the integration and use of the EQ-5D tool to support collaborative care planning and program evaluation. At the conference, we will present results and lessons learned from the pilot.

Conclusion: Results of this 12-month pilot project will be used for widespread adoption across the sector.

Using Learning Collaborative Teams to Support the Collection and Use of Equity Data

Presented by: Sara Bhatti

All Authors: *sara bhatti1*
Author Affiliations: *1alliance for healthier communities*

Background and Objectives: A Learning Collaborative (LC) is a short-term learning system that brings together peers from multiple organizations to seek improvement in a focused topic area, with guidance from a quality improvement (QI) coach.The Alliance for Healthier Communities implemented this learning collaborative to support its member centres to collect and use sociodemographic equity data.

Approach: The LC involved training in QI methodologies and coach support in applying methodologies and testing change ideas. A capstone event was held where each team presented their successes and lessons learned. A process evaluation was conducted to determine if the LC met its intended objectives and to identify areas that worked well and those needing improvement. The evaluation involved a survey and interviews with QI coaches and LC participants.

Results: 21 teams from Community Health Centres, 4 from Aboriginal Health Access Centres and 2 Nurse-Practitioner Led Clinics participated, with each team consisting of a QI team lead, healthcare providers, data management coordinators and administrative staff. Both survey and interview findings revealed that the LC helped improve data collection rates as well as increase QI knowledge and skills of participants.

Conclusion: The results of this evaluation will be used to share across the sector to support collection and use of this data.

An analysis of high emergency department use in the city of Kraków, Poland

Presented by: Iwona Bielska

All Authors*: Iwona Kowalska-Bobko1, Estera Wieczorek1, Natalia Petka1, Michał Frączek1, Tomasz Bielski2, Iwona Bielska1, 3*

Author Affiliations: *1Jagiellonian University, 2Andrzej Frycz Modrzewski Krakow University, 3McMaster University*

Background and Objectives: Research conducted in Canada shows that individuals who frequently attend the emergency department (ED) comprise up to 10% of patients, while account for a third of visits. There is a lack of information on high ED use in other jurisdictions, specifically in Central and Eastern Europe. This study explores the presence of frequent ED use, defined as having five or more visits per year, among patients in Poland to examine this situation in another region.

Approach: A secondary analysis of administrative data was carried out in Kraków, Poland, using information from the Jagiellonian University Hospital, a tertiary care academic centre with 1,526 inpatient beds. Unscheduled ED visits from the 2022 calendar year among adult patients, 18 years of age and older, with high emergency department use (≥5 visits) were included in the descriptive analyses. Patient and visit-level data on gender, age, residence location, ambulance arrival, triage category, specialist consultations, ICD-10 discharge diagnosis, and hospital admission were analyzed. Cross-tabulations were used to summarize the categorical data, while continuous data were described using means and medians.

Results: There were 39,851 ED visits among 32,927 patients of whom 198 had high ED use, accounting for 1,272 visits (mean: 6.4, SD: 2.2, median: 6, IQR: 2.0). Over half of the patients with high ED use were female (n=101, 51.0%) and resided in Kraków (n=138, 69.7%). The mean age was 60.4 years (SD: 19.9, median: 65.5, IQR: 32.8). 45.2% (n=575) of the patients arrived by ambulance. 35.5% (n=451) of the patients were triaged as urgent and 50.8% (n=646) as standard. The most common specialist consultations in the ED were urology (9.7%), neurology (3.1%), and psychiatry (2.7%). The top discharge diagnoses were atrial fibrillation and flutter (n=62, 4.9%), unspecified abdominal pain (n=51, 4.0%), and COVID-19 (n=46, 3.6%). A third of the patients (n=438, 34.4%) were admitted.

Conclusion: This study explored high ED use in Kraków and found that 0.6% of the patients met this definition and contributed to 3.2% of all ED visits. This is lower than found in other jurisdictions, such as Canada. The reasons for this difference will be investigated further to inform policy worldwide.

Communication of Medical and Sociodemographic Information in Managing Patients with High Emergency Department Utilization

Presented by: Iwona Bielska

All Authors: *Justin Kang1, Sydney Tomlinson1, Iwona Bielska1, 2*
Author Affiliations: *1McMaster University, 2Jagiellonian University*

Background and Objectives: Effective communication is crucial in emergency health care for optimal patient outcomes. The nature of emergencies requires clear and efficient communication between health care providers, patients, and other stakeholders. Quick and precise information exchange is key for timely decision-making, care coordination, and delivering appropriate interventions. This scoping review investigates communication and information transfer between health care providers, as well as between patients and health care providers, concerning complex patients in emergency settings.

Approach: Seven databases (Ovid MEDLINE, Embase, AMED, Global Health, Ovid Healthstar, APA PsycInfo, Ovid Emcare) were searched using 17 keywords related to communication in emergency settings to identify relevant literature. The citations were imported into Rayyan for analysis. The inclusion criteria were focused on qualitative research articles, including any publication date and location, with a general study population in emergency settings. Two reviewers assessed the abstracts, with a third reviewer available for conflict assessment.

Results: Following a review of 380 article abstracts, 97 were selected for potential inclusion. These articles will undergo full-text review, as the study is in progress. Data from the chosen papers will be abstracted and presented according to the resulting themes and communication pathways. This review will provide valuable insights from numerous studies, shedding light on the dynamics and importance of communication in emergency health care. Our goal is to refine communication strategies within the emergency department, thus enhancing the quality of care for complex patients. Limitations may include potential publication bias, variability in study design, and temporal and geographic factors.

Conclusion: This review explores the literature on communication in emergency health care settings. The selected articles hold the potential to broaden our understanding of effective communication practices, offering significant implications for health care providers and patients. We anticipate informing the ongoing dialogue about improving communication in emergency departments for care continuity.

Patient and provider satisfaction with a geomapping tool for finding community family physicians: A cross-sectional survey study in Ontario, Canada

Presented by: Lise Bjerre

All Authors: *Lise Bjerre1, 2, Cayden Peixoto1, Christopher Belanger3, Sara Francoeur1*
Author Affiliations: *1Institut du Savoir Montfort, 2University of Ottawa, Department of Family Medicine, 3Belanger Analytics*

Background and Objectives: Docmapper (www.docmapper.ca/www.trouvezunmedecin.ca) is an interactive, online physician geolocating map that was created as a tool for patients seeking medical care in Ottawa and Renfrew County. The goal of the Docmapper tool is to facilitate access to language-concordant primary care by allowing users to search for family physicians in their area by language. This study sought to assess patient experiences and satisfaction with an online interactive physician map as a means of identifying areas of improvement.

Approach: This study used a cross-sectional web-based survey to evaluate patient experiences with the online mapping tool Docmapper.ca (English) and TrouvezUnMedecin.ca (French) between November 9, 2022, and June 19, 2023. The study survey consisted of two substantive questions, one to rate users' overall appreciation of the map using a standard five-point Likert scale, and one free-text question inviting suggestions for improvements to the Docmapper tool. Demographic information was also collected. Responses to satisfaction-based questions were reported as summary statistics, and short-answer responses underwent thematic analysis. The study setting was Ottawa and Renfrew County, Ontario, and the surrounding region including Quebec.

Results: A total of 93 respondents completed an online survey and self-identified as living in Ontario or Quebec. Overall, 57 of these respondents (61.3%) were "Very Satisfied" or "Somewhat Satisfied" with the map, 16 (17.2%) were "Neither satisfied nor dissatisfied," and 20 (21.5%) were "Very Dissatisfied" or "Somewhat Dissatisfied." We found no significant differences in satisfaction by preferred language, age group, physician attachment, or intended beneficiary. In addition, 56 respondents provided short-answer responses to an open-ended question about improvements to the map. The most common specific suggestion for improvement was to show which physicians are accepting new patients (n=20). Other suggestions included keeping data current (n=6), adjusting the user interface (n=23), and including more languages (n=2).

Conclusion: While most users were satisfied with the online map, a significant minority expressed dissatisfaction that the map did not show which family physicians were currently accepting new patients. This suggests that there may be public interest in an accessible database of family physicians in Ontario who are accepting new patients.

Primary Care and French-Language Minorities: Exploring regional access and inequities in language-concordant primary care for French speakers

Presented by: Lise Bjerre

All Authors*: Leanda Godfrey1, Lise Bjerre1, 2, Christopher Belanger3, Patrick Timony4, Alain Gauthier4, Antoine Désilets5*

Author Affiliations: *1Institut du Savoir Montfort, 2University of Ottawa, Department of Family Medicine, 3Belanger Analytics, 4Laurentian University, 5Société Santé en Français*

Background and Objectives: Language-concordant healthcare is an important element of health equity and is associated with improved health outcomes and even reduced mortality in some settings. However, research has found that Francophones in Ontario often have difficulty accessing primary care in French. Our study aims to evaluate the supply and demand for French-speaking primary care at the population level.

Approach: A cross-sectional geospatial analysis to quantify access to language-concordant primary care across all of Ontario and use physician-to-resident ratios to identify areas of higher need; also, we will describe and compare travel burden to access language-concordant primary and specialty care for residents of Northern Ontario, for the general population and for official language minority communities (OLMCs). For all analyses, where possible, comparisons will be made between linguistic groups, and between residents of Northern Ontario and the rest of Ontario. We will also be expanding Docmapper.ca and Trouvezunmedicin.ca to all of Ontario.

Results: Work is currently in progress with a number of deliverables due by the end of March 2024. Most analyses will be complete and results will be available for presentation by the conference date in May 2024.

Conclusion: Study results will enable patients, physicians, and policymakers to identify areas of Ontario with gaps in access, and to work towards improving language-concordant healthcare for Francophones living in Ontario. This project will also lead to the expansion of our Docmapper.ca (or Trouvezunmedecin.ca) tool to all of Ontario.

Creating an open-source tool to model opioid overdoses and deaths

Presented by: Noah Bolohan

All Authors: *Noah Bolohan1, Hawre Jalal2, Deirdre Hennessy1*
Author Affiliations: *1Statistics Canada, 2University of Ottawa*

Background and Objectives: Canada has seen an increasing number of opioid-related harms and deaths, with an estimated 39,435 opioid-related hospitalizations and 40,642 apparent opioid toxicity deaths between January 2016 and June 2023. The objective of this project is to develop an open-source tool aimed to provide insight into the opioid epidemic at multiple levels of health administration across Canada. In particular, the model will be directed towards analyzing the impact of policies and interventions at sub-provincial geographic units.

Approach: We are developing a compartmental agent-based risk model which will leverage detailed socio-demographic and other data to simulate the frequency and locations of opioid use as well as fatality of overdoses. The model focuses on simulating counterfactual scenarios by allowing a number of policies and interventions to be applied to the simulated population and assessing their impact. A key feature of the model is the capability to produce outputs at a health region or public health unit level, enabling region-specific analysis for local health authorities.

Results: A synthetic population is generated using the socio-demographic profile of the geographic region. The model includes two compartmental layers for its agents: one for opioid use type, including prescription and illicit use, and one for opioid use locations, for example households, hospitals or supervised use sites. A number of time-based events may also occur that influence the flow of agents through compartments. Compartment transition and opioid use outcome probabilities are derived from a risk model tailored to an agents' characteristics and compartments. The parameters for this model are national estimates subject to multipliers which are derived from local-level data. The model will be openly available as a Python package, equipped with a web-based user interface.

Conclusion: With the help of collaborations with local health authorities and subject matter experts, we have begun development of a tool that can support policy makers and researchers interested in investigating opioid related harms , while simultaneously being openly available and easy to use.

EVALUATING THE IMPLEMENTATION AND OPERATIONALIZATION OF THE MYHEARTFITNESS LEARNING HEALTH SYSTEM: A QUALITATIVE APPROACH

Presented by: Michael Borean

All Authors: *Madeleine Mant1, David Alter2, 3, 4, Michael Borean2*
Author Affiliations: *1Department of Anthropology, University of Toronto Mississauga, Mississauga, Canada, 2Temerty Faculty of Medicine, University of Toronto, Toronto, Canada, 3University Health Network, Toronto, Canada, 4ICES, Toronto, Canada*

Background and Objectives: A learning health system (LHS) integrates data acquisition into clinical practice in real time. Given that frameworks for LHS evaluation are limited, Kaiser Permanente Washington (KPWA) recently developed a Logic Model (LM) with operational measures for 24 LHS Constructs (inputs, outputs, outcomes). This LM had not been previously applied to an external LHS; therefore, our objective was to evaluate the MyHeartFitness (MHF) LHS against the LM and to provide recommendations to augment MHF.

Approach: Semi-structured interviews were conducted with 10 health providers and administrators from the MHF LHS. An interview guide was developed with interview questions designed to mirror the operational measures described by the LM. Interview transcripts were analyzed using NVIVO 12.7.0 qualitative software via deductive thematic analysis. Themes were labeled as “Key Findings” and were assigned to their respective LM constructs. Key Findings were further characterized as “Well-Developed Areas” or “Less-Developed Areas” of the MHF LHS with respect to their alignment with the relevant LM construct. Recommendations were devised for any constructs for which MHF was deemed to have any Less-Developed Areas.

Results: Key findings for MHF were generated for each LM construct. Well-Developed Areas include MHF’s well-connected multidisciplinary team (Input: People and partnerships), the use of collaborative co-design sessions (Output: Design), and the positive work experiences reported by its care teams (Outcome: Work life for care teams). Less-Developed Areas include the limited diversity of external funding sources (Input: Funding), the lack of formal organizational processes to conduct rapid literature reviews (Output: Evidence synthesis and translation), and the inability to perform comprehensive assessments of programmatic return on investment (Outcome: Programmatic return on investment). A total of 17 recommendations were devised for MHF based on the “Less-Developed Areas” identified for several Logic Model constructs (e.g. “Engage patients and family members as active partners” [Output: Patient and family engagement]).

Conclusion: Mapping the MHF LHS to the LM highlighted several “Well-Developed Areas” and “Less-Developed Areas” and allowed for the provision of actionable recommendations to assist in MHF’s programmatic improvement efforts. Future work will explore how MHF uses feedback from this study to augment the operationalization of its LHS.

Association between unmet social needs and parental stress in a pediatric asthma clinic

Presented by: Mathilde Botella

All Authors: *Mathilde Botella1, Jiaying Zhao2, Mahisa Islam1, Serge Sultan3, Anna Smyrnova1, Eric Fleegler4, Francine M. Ducharme5, Sze Man Tse6, Kim Lavoie7, Tamara Perez1*

Author Affiliations: *1CHU Sainte-Justine Research Centre, 2Department of Psychology, University of British Columbia; Institute for Resources, Environment and Sustainability, University of British Columbia, 3Department of Pediatrics, Faculty of Medicine, Université de Montréal; Department of Psychology, Faculty of Arts and Sciences, Université de Montréal, 4Division of Emergency Medicine, Boston Children's Hospital, Boston, MA, United States; Department of Pediatrics and Emergency Medicine, Harvard Medical School, Boston, MA, United States, 5Division of General Pediatrics, Department of Pediatrics, CHU Sainte-Justine; Department of Social and Preventive Medicine, Université de Montréal School of Public Health; CHU Sainte-Justine Research Centre, 6Division of General Pediatrics, Department of Pediatrics, CHU Sainte-Justine; Division of Respiratory Medicine, Department of Pediatrics, Sainte-Justine University Hospital Center, University of Montreal, 7Montreal Behavioural Medicine Centre, CIUSSS du Nord-de-l'Ile-de-Montreal; Department of Psychology, Université de Quebec à Montreal*

Background and Objectives: There are well documented associations between unmet social needs and undesirable health outcomes, but little data exist on the association between unmet social needs and stress in families of children with asthma. The objective of this study is to document the relationship between unmet social needs and parental stress in a Canadian pediatric asthma clinic.

Approach: Ongoing prospective observational study was conducted in a tertiary care pediatric asthma clinic, between September 2022 and September 2023. Participants were parents of children with a diagnosis of asthma, treated with at least one controller medication. Unmet social needs were collected by parental self-report using a questionnaire assessing 8 domains: employment, housing, ability to pay for utilities, financial resources, food security, transportation, childcare, and education. The four-item Perceived Stress Scale was used to assess how parents perceived stress. Chi-square tests compared our independent variable, the presence vs. absence of unmet social needs, to our dependent variables; each measure of stress.

Results: Of 162 participants, seventy-seven (48%) reported at least one unmet social need. Compared to participants without unmet social needs, those with unmet needs were more likely to report having no control over important aspect of their work or main activity ($p< 0.001$); less likely to report having confidence in their ability to overcome problems ($p< 0.001$); less likely to report having the feeling that everything was going well ($p< 0.001$); and less likely to report having the ability to overcome too many accumulated difficulties ($p< 0.001$).

Conclusion: Findings suggest significant association between unmet social needs and parental stress of children with asthma. These factors may concomitantly increase the burden of adhering to asthma controller medication. This ongoing Canadian study seeks to elucidate the mechanisms by which these factors make adherence to asthma medication more challenging for families.

An integrative review of a decade of health workforce literature in Canada (2014-2023): Key topics and a gap analysis

Presented by: Ivy Bourgeault

All Authors: *Kennedy Onyechie1, Ivy Bourgeault1, Raha Mirshahi1, Sarah Berube1, Renata Khalikova1*
Author Affiliations: *1Canadian Health Workforce Network*

Background and Objectives: Several challenges face Canada's health workforce, including endemic levels of burnout, unacceptable levels of violence, staffing shortages, heavy workloads leading to high levels of attrition; misaligned scopes of practice leading to siloed and duplicative practices, and a lack of timely, accessible, and accurate data about health workers resulting in ad hoc, suboptimal or absent planning for population health needs now and into the future. These challenges require dedicated evidence informed policy directions for workforce sustainability.

Approach: The Canadian Health Workforce Network developed an online library of published and grey literature on the Canadian health workforce since 2014. The library is populated with articles from three systematic review cycles employing a librarian-developed search strategy of key terms applied to PubMed and CINAHL databases. Covidence software is used to screen search results in duplicate for inclusion. A coding scheme building off a librarian developed set of MESH integrative keywords are applied through an online template. Summary tables were developed across ten themes and shared in two online consensus dialogues in June 2023 with 132 research and policy participants.

Results: An initial synthesis of 1667 of articles and reports published from 2018 to 2022 across the six themes and four sectors revealed significant disparities in coverage. The most researched topics included healthy work environments (569) followed by scopes of practice (534) and equity, diversity and inclusion (194), governance and regulation (101), health workforce data (62) and planning (78) followed by migration/integration (52). Home, community and long-term care (289) and primary care (194) were followed by mental health and substance use (97) and sexual and reproductive health care (44). Three key research priorities emerged from our dialogues for each theme and sector, some of which included overlap of the themes and sectors (e.g., need for mental health and substance use health workforce data for planning).

Conclusion: Next steps include completion of coding sources dating back to 2014 and the remainder of 2023, complemented with additions of sources of grey literature uncovered in eight review reports published in 2022 and 2023, with updated summary tables to be compiled and integrated with dialogue transcript data.

Advancing health equity among patients living with diabetes through enhanced access to diabetic retinopathy (DR) screening

Presented by: James Bowen & Aleksandra Stanimirovic

All Authors: *Dr. Valeria E. Rac1, 2, 3, Troy Francis1, 2, 3, Dr. Aleksandra Stanimirovic1, 2, 3, Sonia Meerai1, 2, 4, Rebecca Merritt5, Dr. Michael Brent6, James M. Bowen1, 2, 3*
Author Affiliations: *1Program for Health System and Technology Evaluation, Toronto General Hospital Research Institute, 2Ted Rogers Centre for Heart Research/Peter Munk Cardiac Centre, 3IHPME, University of Toronto, 4Faculty of Social Work, Wilfrid Laurier University, 5South Riverdale Community Health Centre, 6University of Toronto*

Background and Objectives: Diabetic Retinopathy is a serious sight threatening complication of diabetes that is avoidable if detected early enough. Early detection through regular diabetic retinopathy screening is an effective method of avoiding vision loss from diabetes, by enabling earlier intervention and timely treatment. The objective of this qualitative study is to evaluate access and early intervention for patients living with diabetes or pre-diabetic symptoms requiring diabetic retinopathy screening.

Approach: N=20 semi-structured interviews were conducted with patients. Two Community Health Centres in Toronto recruited patients for screening and participants were sampled based on having their health information in the provincial health database. Employing a constant comparative analysis guided by a grounded theory approach, codes and categories were developed and then organized by themes through a reflexive, iterative process, resulting in theoretical coding and analysis. The analysis included mapping policy implications within a micro (patient and healthcare provider level), mezzo (community/organizational level), and macro (policy/structural level) framework.

Results: The use of provincial healthcare administrative data and situating the tele-retina screening in communities, which would not have access to diabetic retinopathy (DR) screening otherwise, was well received by patients. Patients identified multiple responsibilities in their lives such as managing health appointments, food/physical activity intake tracking, and self-monitoring of glucose. The use of existing health data is a proactive measure in screening, which can support patients in their DR care in earlier stages of their diabetes. Patients identified barriers to receiving screening if it was not located in their community, including caregiving, mobility challenges and inconsistent access to primary care. Accessible education on DR and eye screening was identified by patients as pivotal in integrating ongoing eye screening in their overall diabetic care.

Conclusion: Improvements to access of tele-retina technology requires attention to the needs of patients who are marginalized based on race, gender, class, and age. Redefining access of tele-retina technology requires policy/funding considerations for sustainability as part of overall diabetic care, while embedding an equitable and inclusive framework to minimize health inequities.

Policy implications for an equitable and sustainable Diabetic Footcare and Limb Preservation Pathway: Considerations from the health equity impact assessment (HEIA) and patient-partners

Presented by: James Bowen & Lola Oyefeso

All Authors: *Dr. Valeria E. Rac1, 2, 3, Sonia Meerai1, 2, 4, Lola Oyefeso1, 5, James M. Bowen1, 2, 3*
Author Affiliations: *1Program for Health System and Technology Evaluation, Toronto General Hospital Research Institute, 2Ted Rogers Centre for Heart Research / Peter Munk Cardiac Centre, 3IHPME, University of Toronto, 4Faculty of Social Work, Wilfrid Laurier University, 5University of Toronto*

Background and Objectives: Lower extremity ulcers, including diabetic foot ulcers (DFU), are a primary complication of diabetes and estimated to affect approximately 75 out of 100,000 people. These wounds have an impact on mobility, employment and a person's ability to balance treatment with employment demands and quality of life. Diabetic foot ulcers frequently become infected, and if not appropriately managed promptly, can result in lower-extremity minor or major amputation, which is a feared and concerning complication of diabetes.

Approach: A diabetic foot care and limb preservation (DFCLP) pathway provides earlier intervention and screening utilizing tele-health, wound care measurement technologies, and access to interdisciplinary healthcare providers. In creating the pathway, Health Equity Impact Assessment (HEIA) and patient-partner stakeholder focus groups were conducted to provide recommendations on increasing accessibility to populations who are systematically marginalized and do not obtain consistent access to healthcare. The findings from the HEIA and patient-partner focus groups provided in-depth considerations for policies that directly impact care provisions for patients living with diabetes.

Results: The HEIA identified positive and negative impacts on health equity specific to age, disability, ethno-racial communities, Francophone, individuals experiencing homelessness, linguistic communities, low-income, faith communities, rural/remote and inner-urban populations, gender, and sexuality. Patient-partner perspectives provided recommendations on health information gathering, policy and funding barriers to overall footcare, and the absence of footcare screening in primary and diabetic care. Policy recommendations include ways to integrate patient-centered care beyond access to primary care and integration of technological innovations such as wound-care measurements and information sharing guidelines across interdisciplinary healthcare providers.

Conclusion: Further implementation and sustainability of the pathway requires refinement of patient education and awareness, and increasing and enhancing accessibility, which is expected to increase utilization of technologies embedded within the pathway to support earlier intervention and improve overall wound care, particularly among patients with complex care needs.

Screening for diabetic retinopathy in a community population guided by provincial healthcare administrative data

Presented by: James Bowen

All Authors: *Conrad Pow1, Jennifer Rayner2, James Bowen1, 3, Valeria E. Rac1, 3, Aleksandra Stanimirovic1, 3, Michael H. Brent1, 4, 5, M. Ann Phillips6, Debbie Sissmore1, Judy Hung4, Sara Bhatti2, Olivera Sutakovic4, Malcolm Sissmore1, Rebecca Merritt6, Anuisa Ranjan6*

Author Affiliations: *1Diabetes Action Canada, CIHR SPOR Network, 2Alliance for Healthier Communities, 3Program for Health System and Technology Evaluation, Ted Rogers Centre for Heart Research at Peter Munk Cardiac Centre, Toronto General Hospital Research Institute (TGHRI), University Health Network (UHN); Institute of Health Policy, Management & Evaluation, Dalla Lana School of Public Health, University of Toronto, 4Donald K Johnson Eye Institute, University Health Network, 5Department of Ophthalmology and Vision Sciences, University of Toronto, 6South Riverdale Community Health Centre, 7Flemingdon Health Centre*

Background and Objectives: Diabetic retinopathy is a leading cause of blindness in Canada with up to 30% of individuals living with diabetes not screened on an annual basis. Population-based approaches are needed to identify those individuals who have not been screened according to treatment guidelines. The objective of this study is to examine how healthcare administrative data can be leveraged to contact individuals at risk, especially among underserved, systematically marginalized populations, many without provincial health coverage.

Approach: Provincial healthcare administrative data linked with data abstracts from Community Health Centres (CHC) in Ontario were used to identify individuals living with diabetes who had not had their eyes examined for signs of retinopathy within the previous 425 days. Telephone-based outreach from the CHCs was employed to directly contact those who required screening. Tele-Retina screening was provided to consenting individuals. Healthcare utilization patterns including cancelling of appointments, non-attendance, and rescheduling were captured for all individuals who booked appointments for Tele-Retina screening. Tele-Retina images were evaluated by an ophthalmologist.

Results: Between February 1, 2022, to June 30, 2023, 5649 outbound telephone calls were made to 4304 individuals with up to 3 calls per person. The CHCs reached 1641 (38.1%) with 438 (26.7%) consenting to have their data accessed for further discussion regarding the study. Of these individuals, 95% were interested in learning more about the eye screening program at the CHC, and 377 (90.6%) agreed to book an appointment for a Tele-Retina eye examination. Throughout the study, 409 Tele-Retina appointments were booked with 217 individuals having their eyes assessed for retinopathy. Reasons for non-attendance were due to canceling (35.2%), no-show (42.8%), or rebooking (22.0%). Approximately 29% of individuals had some sign of retinopathy.

Conclusion: Identifying individuals to screen for diabetic retinopathy is feasible using provincial administrative data. Several methods of outreach to individuals are required to ensure that a greater number are contacted for Tele-Retina screening. This public health issue could benefit from a provincial-level screening strategy and program to identify undiagnosed individuals.

Evaluating the Feasibility of Implementing the Memory Support System for Mild Cognitive Impairment in a Canadian Hospital: A Perspective from Patients and Caregivers

Presented by: Suraj Brar & Mirou Jaana

All Authors: *Mirou Jaana1, Neil Thomas2, Suraj Brar1, 2, Octavio Santos3*
Author Affiliations: *1Telfer School of Management, University of Ottawa, 2Bruyère Research Institute, 3The Ottawa Hospital*

Background and Objectives: The increasing prevalence of Alzheimer's disease in older Canadians underscores the importance of early intervention during the high-risk phase of Mild Cognitive Impairment (MCI). Despite the lack of approved pharmacological treatments for MCI, behavioural interventions are available. This study evaluates the feasibility of implementing a behavioural intervention known as the Memory Support System (MSS), an evidence-based calendar/note-taking system from Mayo Clinic's HABIT® program, for individuals with MCI and their caregivers in a Canadian hospital setting.

Approach: To gauge the perception of the target population towards the MSS, we developed four distinct surveys. Two surveys target individuals with MCI and their caregivers who are unfamiliar with the MSS (non-intervention), while the other two are for those who have completed the MSS intervention (post-intervention). All four surveys assess the acceptability, demand, and practicality of the MSS. After a comprehensive literature review, we adapted several previously published scales and added specific questions to address our primary aim. Following feedback from learned colleagues, the surveys were finalized and disseminated online and in-person to eligible respondents in December 2023.

Results: To date, three responses have been received; data collection is expected to conclude in May 2024 when preliminary results will be available. Respondents were 55 to 84 years old, retired, had an MCI diagnosis and self-reported good health. Initial responses indicate a good level of acceptability and no negative feedback regarding the MSS. However, responses to questions about expectations, practicality, and demand for the MSS were mixed. Interestingly, respondents were evenly divided on their preferred method (virtual or in-person training to use the MSS) and preferred duration of MSS training (two or six weeks of training). As more responses are collected, we anticipate more divergent trends regarding the feasibility of implementing the MSS.

Conclusion: The study findings will inform the feasibility of implementing the MSS in a Canadian care setting, potentially influencing future policies and guidelines for integrating the MSS into routine care for patients with MCI and their caregivers.

Is Risk Factor Knowledge Associated with Type 2 Diabetes Risk Status? A Survey of Older Adults Living in Social Housing

Presented by: Jasdeep Brar

All Authors: *Jasdeep Brar1, Francine Marzanek2, Melissa Pirrie2, Ricardo Angeles2, Saamiyah Ali2, Gina Agarwal2*
Author Affiliations: *1Department of Health Research Methods, Evidence & Impact, McMaster University, 2Department of Family Medicine, McMaster University*

Background and Objectives: The risk of Type 2 Diabetes (T2D) increases with age and is highest among older adults. Older adults who reside in social housing are a vulnerable population faced with a myriad of lifestyle and social factors that increase their risk of developing T2D. The objective of this is to investigate the influence of risk factor knowledge on T2D risk status among older adults living in social housing.

Approach: Older adults (55 years and older) were recruited using convenience sampling from social housing buildings across five cities in Ontario, Canada from July 2014 to December 2015. Participants completed an interviewer-led survey, the Health Awareness and Behaviour Tool, containing 19 items to assess risk factor knowledge and the Canadian Diabetes Risk Assessment Questionnaire (CANRISK) to calculate a T2D risk score. Descriptive statistics were used to analyze participant characteristics and the proportion of participants who provided correct responses to risk factor knowledge items. Univariate binomial logistic regression analyses were conducted to assess the relationship between risk factor knowledge and CANRISK score.

Results: There were 656 participants. The mean age was 72.1 (SD 8.7) years, 75.6% were female, 89.0% were white, 68.4% obtained a high school education or less, 68.5% were overweight or obese, 64.6% had a high CANRISK score, and 42.2% were concerned of diabetes. The proportion of survey respondents who provided correct responses to risk factor knowledge items ranged from 27.6% to 94.1%. The odds of having a high-risk CANRISK score was 2.095 times greater for people who got the answer incorrect to ‘people who have family members with diabetes have an increased risk of developing diabetes’ compared to those who got it correct (Odds Ratio 2.095; 95% CI [1.016-4.320], p-value = .045).

Conclusion: Knowledge about risk factors was associated with decreased diabetes risk status among older adults living in social housing. Future diabetes prevention programs and policies for older adults should consider promoting risk factor knowledge.

Effectiveness of Health Literacy Interventions Among Community-Dwelling Older Adults: A Systematic Review of Randomized Controlled Trials

Presented by: Jasdeep Brar

All Authors: *Guneet Mahal1, Gina Agarwal1, Harmeet Brar2, Jasdeep Brar3*
Author Affiliations: *1Department of Family Medicine, McMaster University, 2School of Nursing, McMaster University, 3Department of Health Research Methods, Evidence & Impact, McMaster University*

Background and Objectives: Low health literacy is highly prevalent among community-dwelling older adults and is associated with poor chronic disease outcomes, health services use, and health-related quality of life. Health literacy interventions have been developed to improve health literacy, however, the effectiveness of these interventions among older adults remains unclear. This systematic review aims to identify health literacy interventions and examine their impact on improving health literacy among community-dwelling older adults.

Approach: We searched MEDLINE, EMBASE, and CENTRAL up to February 20th, 2023. Eligible studies were randomized controlled trials that implemented interventions aimed at improving health literacy among community-dwelling older adults (aged 55 years and older). Two review authors (JB and GM) screened abstracts and full texts of eligible studies in duplicate. Data extraction and risk of bias assessments using the Cochrane Risk of Bias 2.0 Tool were completed by two review authors (JB and HB) in duplicate. The data was narratively summarized. The systematic review was registered on PROSPERO [CRD42023400379].

Results: Eleven randomized controlled trials were identified for inclusion. The majority of health literacy interventions reported an improvement in health literacy among older adults. All health literacy interventions varied widely in terms of the type and number of intervention components, duration, follow-up times, comparison groups, and health literacy measurement tools. The studies measured different domains of health literacy, leading to inconsistent comparisons across interventions. The majority of studies were identified as having a high risk of bias.

Conclusion: Health literacy interventions can be effective in improving health literacy among community-dwelling older adults. Future research and programs should focus on clearing defining health literacy domains that are being measured.

Strategies to promote recovery-oriented care in psychiatric intensive care units

Presented by: Marjorie Brochu

All Authors*:* *Audrey Laberge1, Marjorie Brochu2, Matthew Menear1*
Author Affiliations: *1Université Laval, 2Université de Sherbrooke*

Background and Objectives: Psychiatric intensive care units (PICUs) provide rapid assessment, stabilization, and intensive treatment to patients experiencing acute, complex mental disorders. In these settings, patients can display a range of disturbed, violent, or unpredictable behaviours and partnering with patients can be challenging. It is unclear whether and how person-centred, recovery-oriented care is delivered in PICUs. We thus aimed to identify strategies for recovery-oriented care in psychiatric intensive care service contexts.

Approach: We conducted a scoping review of the literature on the structures and practices of adult PICU services and performed a sub-analysis of recovery-oriented care in PICUs. We searched for articles in MEDLINE, EMBASE, and PsycINFO databases using keywords related to psychiatric intensive care, acute psychiatric services, and acute, and acute inpatient psychiatry. We also performed reference list searches and hand searches of key journals in the field (from 2000 to 2022). Screening of titles, abstracts and full-texts were performed by multiple team members. We used a standardized form to extract data on structures and practices promoting recovery within PICUs.

Results: A total of 165 articles met the inclusion criteria for the scoping review but fewer than half described strategies that teams or hospitals used to promote recovery-oriented care. Strategies included practices that promoted patient autonomy and choice over treatments, involvement in care planning and patient safety plans, efforts to involve families in care, establish positive relationships with staff, and collect input from patients on interventions and the care environment. Few PICUs explicitly referred to their services as recovery-oriented and we identified many practices that went counter to recovery principles. Based on our results, we present a framework for the delivery of recovery-oriented care in these highly specialized acute care settings.

Conclusion: Recovery-oriented care does not appear to be the norm in psychiatric intensive care units. However, the results from our scoping review shed light on several strategies to advance the recovery of highly vulnerable individuals receiving acute psychiatric care in these settings.

Impact of the COVID-19 pandemic on clinical outcomes of patients with a disability hospitalized on a general internal medicine service

Presented by: Hilary Brown

All Authors: *Bijun Wen1, Surain Roberts1, Amol Verma2, Rahim Moineddin2, Fahad Razak1, Hilary Brown2*
Author Affiliations: *1Unity Health Toronto, 2University of Toronto*

Background and Objectives: The COVID-19 pandemic had sweeping impacts on hospital care, including diverting staff and equipment to COVID-19 patients, impairing communication with patients because of facemasks/shields, restricting visitor policies, and disrupting post-discharge supports. While such disruptions negatively affected clinical outcomes for COVID-19 patients with disabilities, the effects on patients with disabilities and non-COVID-19 illnesses have not been examined. We compared the impact of the COVID-19 pandemic on clinical outcomes of hospitalized patients with and without a disability.

Approach: We performed a retrospective cohort study of all non-COVID-19 adult medical admissions from April 2016 to June 2021 at 16 hospitals in GEMINI, a research collaborative that collects hospital data across Ontario. We modeled pre-pandemic in-hospital mortality, ICU admission, and length of stay, for patients with and without disabilities separately, to predict expected outcomes during the pandemic based on patient characteristics. We reported absolute rate difference between observed and expected outcomes, and incidence rate ratios, for each pandemic month. Negative binomial regression was used to estimate if differences between observed and expected outcomes diverged by disability status.

Results: There were 46,571 pre-pandemic and 14,915 pandemic hospitalizations among patients with disabilities, and 257,795 pre-pandemic and 74,882 pandemic hospitalizations among patients without disabilities. Throughout the study period, patients with disabilities had higher crude rates of in-hospital mortality (pre-pandemic: 10.2% vs 9.4%, pandemic: 11.1% vs 10.0%) and ICU admission (pre-pandemic: 20.6% vs 17.5%, pandemic: 20.1% vs 17.8%), and longer hospital stays (pre-pandemic: 11.9 vs 7.8 days, pandemic: 11.9 vs 8.0 days), than patients without disabilities. Disability was associated with all outcomes after adjustment for patient characteristics (all $p<0.001$). However, differences between predicted and observed in-hospital mortality, ICU admission, and length of stay during the pandemic were similar for patients with or without disabilities (all $p>0.2$), indicating no differential effect of the pandemic on disabled patients.

Conclusion: The COVID-19 pandemic did not appear to have a differential effect on the clinical outcomes of patients with disabilities compared to those without disabilities. However, consistent disparities in these outcomes across pre-pandemic and pandemic years suggest patients with disabilities could benefit from accessible in-hospital and post-discharge supports.

Depression in children and youth in British Columbia: an analysis of prevalence and pharmacological treatment trends

Presented by: Mary Bunka

All Authors: *Kimberlyn McGrail1, 2, Stirling Bryan1, 3, Mary Bunka1, 3, Michael Law1, 2, Sandra Peterson2*
Author Affiliations: *1University of British Columbia, 2Centre for Health Services and Policy Research, 3The Centre for Clinical Epidemiology and Evaluation*

Background and Objectives: Depression is a common mental health condition which often manifests early in life. However, Health Canada has not approved any antidepressant medication for use in children and adolescents. Off-label prescribing is common and though evidence-based Canadian guidelines exist for prescribing in this age group, it is unknown to what extent prescriptions follow these guidelines. This study will describe trends in antidepressant use in children/youth in BC and their alignment with prescription guidelines.

Approach: Administrative Data (medical service payment information, hospitalizations, prescriptions, and demographic information), provided by Population Data BC, will be used to describe prescription trends in children and youth with depression from ages 6 to 24 between 2008 and 2020. We will use Poisson regression to explore prescribing rates by age, sex, rural vs. urban, and neighbourhood. We will use a logistic regression effect size model to examine on- vs. off-guideline prescriptions, stratified by the same characteristics. The sensitivity of results to the use of different operational definitions of depression and to including/excluding different comorbidities will also be explored.

Results: Preliminary results will be presented in the poster. Prevalence will be estimated as the number of children and youth with depression in our cohort divided by the total number in the province. The Poisson regression results will show if one or more type(s) of antidepressant is prescribed more or less often in certain circumstances, and the logistic regression will indicate whether certain children/youth are more likely than others to be treated in concordance with guidelines. Sensitivity analyses will allow us to gauge the robustness of the results given different operational definitions of depression and the inclusion/exclusion of common comorbidities.

Conclusion: Presenting trends in antidepressant prescribing will give a baseline measurement for antidepressant use in children/youth with depression in the pre-pandemic era. Such data have not previously been presented. Further, our work provides the opportunity to uncover disparities in best-evidence prescribing, with a view towards steering future research or interventions.

Creating a public forum for sharing ideas and priorities for health data in Canada

Presented by: Julia Burt

All Authors*:* *Julia Burt1*
Author Affiliations: *1Health Data Research Network Canada*

Background and Objectives: There is a growing momentum towards two-way dialogue in patient and public engagement (PPE). Involving the public, including patients, in discussions on health data collection and use is imperative for ensuring transparency, accountability, equity, and fairness in health data practices. Guided by its Public Engagement Strategy, Health Data Research Network Canada (HDRN Canada) has committed to creating opportunities for knowledge sharing amongst diverse stakeholders in the health data space.

Approach: In 2023, HDRN Canada's Public Engagement Working Group (PEWG) and Public Advisory Council (PAC) hosted its first public forum, Health Data for All of Us: Sharing Ideas and Priorities. Patients and other members of the public, researchers, students, policymakers and healthcare professionals came together for dialogue on challenges and opportunities in the collection, sharing and use of health data in Canada. Through facilitated dialogue and panel discussions, participants discussed the necessity of PPE in data-intensive health research, in strengthening the Canadian health data ecosystem, and in addressing issues regarding the use of data from or about systemically marginalized populations.

Results: The Forum fostered rich discussion among over 200 individuals from across Canada and beyond with diverse backgrounds and experiences. The discussions highlighted themes related to the importance of 1) trust, transparency and plain language in health data collection, sharing and use; 2) public benefit in data-intensive health research, particularly when considering private sector use of health data; 3) equitable data collection that benefits, not harms, systemically marginalized populations; and 4) access to, and availability of, health data that accurately represents the health system and the health of populations. This presentation will discuss these themes in more detail.

Conclusion: HDRN Canada's PEWG and PAC continue to focus on turning identified themes into key actions for HDRN Canada, with the goal of contributing to a stronger and more equitable health data ecosystem and a deeper engagement with the patients and the public within the health data space.

Health data for all: How public engagement drives the work of Health Data Research Network Canada

Presented by: Julia Burt

All Authors: *Julia Burt1*
Author Affiliations: *1Health Data Research Network Canada*

Background and Objectives: Supported by the Canadian Institutes of Health Research's Strategy for Patient-Oriented Research (SPOR), Health Data Research Network Canada (HDRN Canada) is committed to increasing public influence on data systems through impactful public engagement. The development and delivery of a Public Engagement (PE) Strategy for HDRN Canada is key to ensuring strategic coordination of projects that require deep involvement of members of the public.

Approach: HDRN Canada's PE Strategy was developed by the network's Public Engagement Working Group (PEWG) in consultation with its Public Advisory Council (PAC), member organizations and SPOR entities. Informed by the SPOR PE Framework, HDRN Canada's PE efforts embrace the principles of inclusiveness, adequate support and flexibility, mutual respect, and co-design.
This session will outline the process of developing the strategy and highlight important components of the network's PE strategy, including: 1) the work of the PAC; 2) examples of PE-focused projects about health data; and 3) mechanisms for knowledge sharing across public and patient councils.

Results: Emerging from HDRN Canada's public engagement are important themes that highlight key barriers and challenges to health data collection, sharing and use, from the perspectives of the public, researchers and other stakeholders. These themes include: earning (or repairing) trust with organizations that collect health data, particularly regarding those who have not been well-served by the healthcare system; the importance of public benefit as an essential requirement for health data social licence; encouraging equitable data collection that benefits, not harms, systemically marginalized populations; transparency in communicating to the public about how and why their data are being used, including associated risks and benefits; and consideration of additional safeguards and protection mechanisms for private sector use of public health data.

Conclusion: HDRN Canada's PE Strategy outlines multiple mechanisms in which the advice of the PAC, and other members of the public, is incorporated into network decision-making. Aligning priorities with the identified themes will contribute to the network's vision of using data to drive improvements in health equity for all Canadians.

Assessing the potential for language-concordant care for Francophones in Ontario: A population-based cross-sectional study

Presented by: Kady Carr

All Authors: *Anan Bader Eddeen1, Kady Carr2, 3, Claire E. Kendall1, 4, 5, 6, Denis Prud'homme6, Lise M. Bjerre5, 6, Josette-Renée Landry6, 7, 8, Marie-Hélène Chomienne6, Michael Fitzgerald4, Ricardo Batista Moliner9, Sophie Lamontagne4, 5, Daniel Bédard6, Alain P. Ga*
Author Affiliations: *1ICES, 2University of Ottawa, 3Ottawa Neighbourhood Study, 4Bruyère Research Institute, 5Department of Family Medicine, University of Ottawa, 6Institut du Savoir Montfort, 7Faculté de Médecine, Université de Montréal, 8École interdisciplinaire des sciences de la santé, Faculté des sciences de la santé, Université d'Ottawa, 9Akausivik Inuit Family Health Team, 10Faculty of Education and Health, Laurentian University, 11Centre for Rural and Northern Health Research, Laurentian University, 12Ottawa Hospital Research Institute*

Background and Objectives: Access to language-concordant care is a key component of equitable health care. One barrier to such care can arise when health care providers with minority language competency are not located in the community where the minority language population resides. This study examined potential access to French-speaking family physicians for Francophones in Ontario by comparing the geographic distribution of family physicians to that of Francophones in the province.

Approach: We used administrative data held at ICES on physicians' practice and billing data to identify physician specialty, practice location, and self-reported competency to practice in French. We used 2016 Census data and ArcGIS conversion to identify Ontario resident language based on the first official language spoken and to describe the proportion of Francophone residents in Aggregated Dissemination Areas (ADAs) across Ontario. We constructed a population-weighted measure of geographic inequality for the ratio of French-speaking family physicians to the Francophone population.

Results: Data were available for 1,643 ADAs, with 550,280 Francophones, 4.1% of the Ontario population. Francophones constituted a greater proportion of the population in northeastern and eastern Ontario. We identified 8,199 family physicians, 1,169 French-speaking. Provincially, there were 2.16 French-speaking physicians per 1,000 Francophone residents, compared to 0.64 physicians per 1,000 Anglophone residents. In ADAs where Francophones constituted the minority of the population, the Francophone physician ratio was higher than that for Anglophones, reaching 3.46 vs 0.62 in the 83.4% of ADAs where Francophones constituted >0% to <5% of the population, whereas in ADAs where Francophones constituted the majority, the Francophone ratio was lower (0.62 vs. 2.02). Eight ADAs in northeastern and eastern Ontario had a large deficit in French-speaking physicians compared to the provincial ratio.

Conclusion: The findings from this study highlight potential barriers that the Francophone minority populations in Ontario might face in accessing language-concordant primary care. These findings offer insights about areas in Ontario with a high proportion of Francophones that could benefit from policies and programs to recruit and retain French-speaking family physicians.

An exploration of factors that influence shared implementation leadership in a nursing context: A collective case study

Presented by: Sonia Castiglione

All Authors: *Wendy Gifford1, Sonia Castiglione2, Mélanie Lavoie-Tremblay3, Kelley Kilpatrick2, Sonia Semenic2*
Author Affiliations: *1University of Ottawa, 2McGill University, 3Université de Montréal*

Background and Objectives: In the nursing context, multiple and diverse leaders at the point of care in both formal and informal roles are expected to create conducive environments for successful implementation of evidence-based practices (EBPs). Yet, little is known about how nurse leaders collectively support implementation and what facilitates this process. In this presentation, we will describe a novel concept of shared implementation leadership, with a specific focus on what factors influence this in a nursing context.

Approach: We are conducting an in-depth qualitative collective case study at a large university-affiliated health network in Montréal, Canada on two inpatient units who had successfully implemented EBPs. We collected data though focus groups and individual interviews with key informants (including nurse managers, nurse educators, advanced practice nurses, staff nurses, interprofessional clinical partners and senior organizational leaders involved in the implementation), and a review of organizational documents. We developed a conceptual framework of shared implementation leadership to guide a thematic analysis of case-specific behaviours, social processes and factors that influence the leadership process, followed by a cross-case comparison.

Results: Emerging findings illustrate that nurse leaders engage in collaborative interactions to collectively enact multidimensional and effective leadership behaviors along the continuum of implementation. We are uncovering several multi-level factors consisting of perceptions, structures, and processes that influence the shared implementation leadership process. These factors include the characteristics of the implementation project, the effectiveness of point of care nurse leaders, cohesive working relationships among nursing leadership team members, the complementary nature of point of care leader roles available on the unit, a learning culture on the unit, and processes and structures which embed collaboration at the unit and organizational level. The interplay between the shared implementation leadership process and the influencing factors maintains a dynamic context that reinforce one another.

Conclusion: Our findings will illuminate the contribution of diverse nursing leader roles in implementing EBPs to improve quality care, which can inform the development of tailored educational interventions for current and future nurse leaders, and strategies within the work environment to bolster the capacity of nursing leadership teams as change drivers.

Association of Body Mass Index on Self-Perceived Troubled Sleep in the US Adults: Data from the National Health and Nutrition Examination Survey (2007-2018)

Presented by: Amarildo Ceka

All Authors: *Amarildo Ceka1*
Author Affiliations: *1Centre for Clinical Epidemiology and Evaluation (VCHRI*

Background and Objectives: Obesity and inadequate sleep are two significant public health issues faced by adults in the United States. While studies have shown a link between short sleep duration and obesity in children, the connection between Body Mass Index (BMI) and subjective sleep difficulty in adults is not well understood. This study uses data from the National Health and Nutrition Examination Survey (2007-2018) to examine the relationship between BMI and subjective sleep difficulty in adults.

Approach: The study included 22,319 adults aged 18 and older who responded to questions about BMI category and sleep difficulty. Two analyses were conducted using multivariable logistic regression to compare the relationship between the exposure and outcome. The results of the unadjusted and covariate-adjusted models were evaluated to determine the odds ratio of troubled sleep in individuals with a BMI > 30. A missing data analysis through multiple imputations was also performed to yield a comprehensive understanding of the relationship between BMI and subjective sleep difficulty.

Results: The results of the study indicated that individuals with a BMI > 30 had a significant odds ratio of 1.14 (95% CI 1.04, 1.25) for troubled sleep. The missing data analysis through multiple imputations yielded significantly higher odds of experiencing troubled sleep compared to the reference group (OR 1.28, 95% CI 1.19, 1.37).

Conclusion: Results indicate that maintaining a healthy weight correlates with enhanced sleep quality and overall well-being. Individuals with a BMI >30 exhibited a higher odds ratio for sleep troubles, underscoring the importance of public health initiatives promoting healthy weight management to mitigate health risks associated with obesity and poor sleep.

Bridging the Gap Between Expanded Pharmacist Services and Payment Models in British Columbia, Canada- A Jurisdictional Scan

Presented by: Amarildo Ceka

All Authors: *Bhuvi Juneja1, Olivia Tseng 1, Craig Mitton1, Amarildo Ceka1*
Author Affiliations: *1CENTRE FOR CLINICAL EPIDEMIOLOGY AND EVALUATION*

Background and Objectives: Over the past few decades, the role of pharmacists has evolved significantly, expanding beyond traditional dispensing services to include clinical activities like medication reviews, chronic disease management, immunizations, and vaccinations. However, the reimbursement models have not kept pace with their changing roles. The objective of this review was to summarize the different reimbursement models in some key healthcare systems worldwide.

Approach: We conducted a comprehensive literature search to investigate the research questions concerning the payment structure for pharmacists providing expanded services for minor ailments. We searched MEDLINE and EMBASE databases from January 1, 2003, to September 20, 2023, focusing on pharmacy services, remuneration, and minor ailments in various countries, including the UK, Australia, New Zealand, the USA, Canada, and Switzerland. The search yielded 11 primary studies, including qualitative, mixed methods, retrospective cohort, and economic impact studies.

Results: The included studies examined three payment models: fee-for-service, performance-based payment models (PBPM), and capitation models. The studies have shown different results regarding the advantages and disadvantages of each remuneration model. The fee-for-service model encourages dispensing based on volume but does not promote quality care. On the other hand, PBPM models are effective in promoting quality care, but they lack flexibility. Capitation models incentivize preventive care but are not ideal for acute care.

Conclusion: This comprehensive overview of pharmacist remuneration models highlighted the need to explore alternative payment models to encourage expanded pharmacist services. The study emphasizes the significance of using evidence-based reimbursement models to ensure fair compensation for clinical services and enhance the quality of care.

A policy review on the visibility of migrant women exposed to, and at risk of gender-based violence: considerations for inclusive and equitable policies and programs in Canada

Presented by: Cyndirela Chadambuka

All Authors: *Beverley Essue 1, Cyndirela Chadambuka1*
Author Affiliations: *1Dalla Lana School of Public Health, University of Toronto*

Background and Objectives: Gender based violence (GBV) has had distinct and disproportionate impact on the health and wellbeing of migrant women in Canada. Currently, there is dearth of documented information concerning the inclusion of migrant women in GBV-related public policies in Canada. The present study examines the extent to which Canadian public policies reflect and address the needs of migrant women who have experienced GBV.

Approach: Guided by the Health Policy Triangle and the Intersectional Feminist Policy Analysis (IFPA) Framework, we conducted a policy review of 37 publicly available GBV-related policy documents at federal and provincial (British Columbia and Ontario) levels.

Results: Migrant women's visibility in the Canadian policy landscape remains limited, as their unique needs are often grouped into broader categories such as 'visible minorities'. This approach fails to acknowledge their distinct lived experiences. Regardless of the federal and provincial efforts in developing policies targeted at GBV prevention, several significant policy gaps came to light. These include the absence of well-defined protective measures for migrant women in precarious employment as well as the hurdles posed by immigration restrictions that pose a significant challenge for those seeking to leave abusive relationships, particularly in cases of dependent migration status. Highlighted policy gaps have a negative impact on the social functioning of migrant women, limiting their access to services and opportunities, which adversely affects their overall health and wellbeing.

Conclusion: The inclusion of an intersectional perspective into policy formulation and implementation is crucial for recognizing the distinct needs of migrant women who experience GBV. Failure to acknowledge these varying needs and the real-life experiences of this diverse group can jeopardize the comprehensive and successful implementation of GBV response policies.

Commonwealth Fund Health Policy Survey of the General Population: An International Comparison of Avoidable Emergency Department visits

Presented by: Winnie Chan

All Authors: *Masud Hussain1*
Author Affiliations: *1Canadian Institute for Health Information*

Background and Objectives: Access and continuity of care are essential requirements for the treatment of chronic diseases and addressing non-urgent health concerns. The volume of emergency department visits in Canada have continued to increase across all age categories. Equitable access and availability to a regular doctor or place of care can mitigate potentially avoidable use of emergency departments (ED) and reduce the strain on hospital resources.

Approach: The Commonwealth Fund (CMWF) 2023 International Health Policy survey of adults 18+ collected data on nationally representative samples in 10 high-income countries including Canada. The survey provides international comparisons across various topics, such as access to primary care and population health. A random population sample was selected based on cell phone and landline number and survey interviews were conducted by phone. Data from the survey were weighted according to the population characteristics of each country to ensure accurate representation. Significance tests were applied to determine whether Canadian results were significantly different from the CMWF average of 10 countries.

Results: The survey collected results from 4,820 respondents across Canada. The past two years, Canadians reported significantly more ED visits (43%) than the CMWF average (32%). Approximately 2 in 5 Canadians reported their last ED visit could have been treated at their regular place of care (CMWF average: 34%). Of Canadians who had an avoidable ED visit, 55% lived in rural areas, 35% lived in urban areas, and 75% reported they were not able to get a medical appointment on the same or next day the last time they needed to see a doctor. Similarly, only 23% of Canadians reported it was very or somewhat easy to get care in the evenings, on weekends, on holidays without going to ED, a drop from 35% in 2016.

Conclusion: Directing the care of patients with non-urgent health concerns from emergency departments to primary care can reduce wait times and improve patient experience. As part of the shared health priorities, emphasis on family health teams and broadening health professionals in primary care can alleviate unnecessary emergency department visits across Canada.

Patient Care within a Home Ventilatory Program in the Context of the COVID-19 Pandemic: Preliminary Survey Results

Presented by: Kathleen Charlebois

All Authors: *David Zielinski1, Francine Noël2, Kathleen Charlebois2, Thanh Diem Nguyen3, Basil Petrof4, Caroline Minville5, Andrea Benedetti2, Marta Kaminska6, François Maltais7, Bruno Paradis8, Josie Brooks2, Éliane Roy Richard9, Véronique Adam10, Jean-Paul Praud11,*
Author Affiliations: *1McGill University Health Centre (Montreal Children's Hospital, National Program for Home Ventilatory Assistance), 2Research Institute of the McGill University Health Centre, 3CHU Ste-Justine, 4McGill University Health Centre (Montreal Chest Institute), 5Institut Universitaire de Cardiologie et de Pneunologie de Québec (National Program for Home Ventilatory Assistance), 6McGill University Health Centre (Respiratory Division/Sleep Laboratory), 7Institut Universitaire de Cardiologie et de Pneumologie du Québec, 8CISSS Laval (Programme d'assistance ventilatoire à domicile de Laval), 9Saint-Jérôme Regional Hospital, 10National Program for Home Ventilatory Assistance - Programme national d'assistance ventilatoire à domicile, 11Centre hospitalier universitaire de Sherbrooke, 12Lady Davis Institute*

Background and Objectives: Confusion over the use of home ventilatory devices during the COVID-19 pandemic placed significant challenges for patients requiring home respiratory care, especially those with severe respiratory conditions, which is believed to have led to disruptions in services. This study aims to understand the effects of the COVID-19 pandemic on patients receiving care through a provincial home ventilation program (HVP), by focussing on patients' perceptions of care (respiratory and non-respiratory), whether at home or in hospital

Approach: Patients who were in the HVP between March 2020 and March 2022 were asked to complete a survey questionnaire for each participant type (adults, pediatric, patients between 14 and 17 years old and respondents of deceased patients). The main topics of the survey questionnaire comprised socio-demographic information, medical history, general healthcare, home respiratory care, COVID-19 illness, hospital care and end of life concerns. The PROMIS Global Health Scale and Conor-Davidson Resilience scales were also included in the questionnaire. Descriptive statistics for questionnaire data will be provided, and the chi-squared test will be used to compare patient subgroups.

Results: Among 108 adult respondents to date, 51% were male and 48% female. The mean age was 64 years. For 56.5 %, phone appointments replaced in-person meetings. 87% received support from their home respiratory therapist regarding the use of their ventilatory machine, COVID-19 and potential hospitalization. 79 % were satisfied with their home respiratory care. Of the 21 % of patients receiving non-respiratory home care during the pandemic, 65% reported no disruptions, 13 % reported a minor disruption and 13 % a major disruption or complete end of services, relying instead on informal sources of support. 11 % reported not accessing perceived needed clinic/hospital care with 25 % of those reporting a cancellation for reasons unknown, and 33% not going for fear of COVID infection.

Conclusion: Preliminary results suggest ongoing home respiratory care support throughout the HVP. Few patients receiving non-respiratory home care experienced interruptions but those did depended on the availability of an informal support network. Fears over COVID infection led some patients to forgo planned care.

Home Respiratory Care Within a Provincial Home Ventilation Program in the Context of the COVID-19 Pandemic: Preliminary Results from Focus Group Discussions with Patients and Healthcare Professionals

Presented by: Kathleen Charlebois

All Authors: *Jean-Paul Praud1, Basil Petrof2, Thanh Diem Nguyen3, Marta Kaminska4, Sandra Pelaez5, Kathleen Charlebois6, Francine Noël6, Bruno Paradis7, Caroline Minville8, Éliane Roy Richard9, Véronique Adam10, David Zielinksi11, François Maltais12, Andrea Benedetti6*

Author Affiliations: *1Centre Hospitalier Universitaire de Sherbrooke, 2McGill University Health Centre (Montreal Chest Institute), 3CHU Ste-Justine, 4McGill University Health Centre (Respiratory Division/Sleep Laboratory), 5Lady Davis Institute, 6Research Institute of the McGill University Health Centre, 7CISSS Laval (Programme d'assistance ventilatoire à domicile de Laval)), 8Institut Universitaire de Cardiologie et de Pneumologie de Québec (National Program for Home Ventilatory Assistance), 9Saint-Jérôme Regional Hospital, 10National Program for Home Ventilatory Assistance-Program national d'assistance ventilatoire à domicile, 11McGill University Health Centre (Montreal Children's Hospital, National Program for Home Ventilatory Assistance), 12Institut universitaire de Cardiologie et de Pneumologie de Québec*

Background and Objectives: The COVID-19 pandemic presented significant challenges for patients with severe respiratory conditions using home ventilation devices, with a high risk of severe COVID-19 illness and disrupted healthcare services. Infection control guidelines including on use of ventilatory machines may have underpinned such disruptions. This ongoing study aims to understand the effects of the COVID-19 pandemic on patients receiving care through a provincial home ventilation program, by focussing on patients' and carers' perceptions and experiences.

Approach: Online focus groups with adult patients and healthcare professionals were conducted separately. A summary of each focus group was written, informed by notes taken during focus groups. An initial codebook was developed drawing on a realist approach and on concepts around self-care to understand how patients managed their care alongside healthcare professionals. Recordings were uploaded directly onto qualitative analysis software, transcribed and coded. A deductive and inductive approach underpinned the coding process. Guiding thematic analysis is the aim of identifying context-mechanism-configurations surrounding the effects of the pandemic on patients using a ventilatory device, in accordance with a realist approach.

Results: Three focus groups were conducted with healthcare professionals and two with adult patients. With thematic analysis ongoing, preliminary themes point to the following: 1) new ways of working and adapting, 2) confusion over communication of procedures and guidelines, 3) adherence and self-care, 4) inconsistencies in care and resources available and 5) unrealistic demands and expectations. Patients remained satisfied with their respiratory home care. Doubts over the availability and use of ventilatory machines in hospitals reflected hospitalized patients' experiences and underpinned fears over hospitalization. Healthcare professionals underlined reduction in adherence, loss of autonomy and deconditioning among their patients. Reductions in home visits meant prioritizing patients in need of immediate care to ensure follow-up. Locally-developed protocols provided stability despite confusion over the communication of COVID guidelines.

Conclusion: While healthcare professionals grappled to develop care modifications and adaptions to the pandemic, patients remained satisfied with their home care. However, some patients experienced a sense of panic upon some of the information being circulated during the pandemic, while healthcare professionals called for clearer guidelines, particularly for home care.

Elements of Successful Care Coordination in Home and Community Care: A Rapid Realist Review

Presented by: Emily Charron

All Authors: *Walter Wodchis1, Priyanka Gayen1, Kaileah McKellar2, Emily Charron1, Gayathri Embuldeniya2*
Author Affiliations: *1author, 2presenter*

Background and Objectives: Within the home and community care (HCC) sector, understanding the conditions fostering successful care coordination is crucial. This realist review considers the context and mechanisms influencing the successful implementation of effective care coordination within HCC models. It explores the fit between populations and specific coordination models and investigates the potential influence of integrated care teams and health system reforms on these models.

Approach: Our approach employed a rapid realist review methodology to investigate care coordination in home and community care settings. Our search strategy included an initial scoping search identifying existing reviews from four online databases including Google Scholar. The screening phase prioritized articles relevant to the research question, ensuring a comprehensive foundation for subsequent study phases. We included English, peer-reviewed articles across study designs and settings that focused on care coordination. Data synthesis looked across studies to find CMO configurations of context (C), mechanisms (M), and the outcome of care coordination in home and community care settings.

Results: Preliminary insights from the literature suggest a complex interplay of contextual factors and mechanisms influencing care coordination in the home and community care (HCC) sector. Based on preliminary findings, key contexts and mechanisms include variations in HCC settings, broader healthcare system reform, patient/physicians' relationships, and integrated care teams shaping the success of care coordination models. The need for tailored coordination models for diverse populations becomes evident, emphasizing the importance of flexibility in HCC settings. The evidence generated from this review will contribute to addressing the identified gaps in the literature and inform the development of targeted interventions to enhance care coordination in home and community care.

Conclusion: This rapid realist review will provide insight into the conditions shaping effective care coordination within HCC, with a particular emphasis on diverse population needs. Moving forward, the results of this review are anticipated to provide insights into effective care coordination strategies, guiding practitioners, policymakers, and stakeholders in optimizing HCC organization.

Machine Learning-Based Phenotyping of Hospital-Acquired Pressure Injuries from Narrative Electronic Medical Records (EMR) Data

Presented by: Ken Cheligeer

All Authors: *Yuan Xu1, 2, Jun Yan3, Danielle A. Southern1, Natalie Sapiro1, Cathy Eastwood1, Hamed Jafarpour3, 4, Hude Quan1, Cheligeer Cheligeer1, Yong Zeng3, 4, Guosong Wu1, Qi Qi1*
Author Affiliations: *1Centre for Health Informatics, University of Calgary, 2Department of Oncology, Cumming School of Medicine, University of Calgary, 3Concordia Institute for Information Systems Engineering, Concordia University, 4Design Lab, Concordia University*

Background and Objectives: Hospital-Acquired Pressure Injuries (HAPI), caused by prolonged immobility, are inadequately detected using International Classification of Diseases codes from administrative data. Electronic Medical Records (EMRs) phenotyping, utilizing machine learning and natural language processing, effectively detect HAPI patterns in extensive EMR data, thereby identifying HAPI cases more efficiently and accurately. This approach uncovers hidden patterns and associations in EMR data, providing valuable insights into risk factors, treatment effectiveness, and patient outcomes related to HAPI.

Approach: We conducted a retrospective cohort study on adults admitted to four Calgary hospitals between January and August 2022. The study included all clinical notes documented in the Electronic Medical Records (EMR) for the development of machine learning algorithms. Patients with a hospital stay length of less than three days were excluded from the study due to their low risk of developing HAPI. An 80:20 data split was used for training, employing an eXtreme Gradient Boosting (XGBoost) classifier with Bayesian optimized hyperparameters. Model performance was evaluated using sensitivity, positive predictive value (PPV), and F1 score.

Results: The cohort consists of 5,743 patients, of which 47.8% are females (n=2,748) and 52.2% are males (n=2,995). The median age was 67 years (interquartile range: 53-79). Hospitalization data showed a median stay of 11.8 days (SD=18.8) and a median CCU time of 4.4 hours (SD=24.6), indicating significant variability in patient experiences. As for the date of this study, 245 (4.3%) patients are identified as HAPI. Our model achieved 89% sensitivity, 82% positive predictive value and 86% f1-score on a test set of 1,149 (HAPI: 47, non-HAPI: 1,102) patients.

Conclusion: Our model accurately phenotypes HAPI in a population-based real-world electronic dataset, suggesting the potential for EMR-based machine learning methods to support HAPI identification. This automated method further facilitates the study of adverse events, streamlines reporting processes, aiding in compliance with healthcare standards and regulations, and ultimately improves patient safety.

Interprofessional Partnering on Policy & Advocacy to Address the Health Human Resource Crisis in Canada: Measuring Progress

Presented by: Ashley Chisholm & Karey Shuhendler

All Authors: *Ashley Chisholm1, Artem Saforov2, Alex Bourassa3, Jasmine Neeson1, Carmela Bosco4, Karey Shuhendler1*
Author Affiliations: *1Canadian Medical Association, 2College of Family Physicians of Canada, 3Canadian Nurses Association, 4CBR consulting*

Background and Objectives: While Canada has been experiencing a health human resources (HHR) problem for some time, COVID-19 turned it into a crisis. In response, the College of Family Physicians of Canada (CFPC), Canadian Medical Association (CMA), and Canadian Nurses Association (CNA) partnered to develop eight HHR policy recommendations to the federal government aiming to alleviate the underlying issues that caused the crisis. This presentation summarizes an approach to measure policy advancement from April 2022 to December 2023.

Approach: A multi-pronged approach was used to measure policy advancement on the eight HHR recommendations. Analysis of publicly available federal, provincial, and territorial announcements for commitments related to the eight HHR recommendations were performed. Announcements include budget reports, bilateral agreements, action plans, programs, and toolkits. The analysis further included the level of implementation of each commitment. Finally, a focused consultation was conducted to better understand the nuances of the implementation of the eight HHR recommendations at the federal, provincial, territorial level and by profession.

Results: Progress has been made on all the eight recommendations with substantial progress made on retention incentives for health workers, and little advancement on a pan-Canadian mental health strategy for health care workers. Provinces and territories have responded to the need to improve health care services by targeting funding to address some of the most pressing challenges, such as investments in recruiting and retaining health care professionals in rural, remote, and marginalized communities. Jurisdictions are also introducing reform measures to enable better planning related to the distribution of our health care resources. Some jurisdictions have improved access to primary care through innovations such as expanding team-based care and integrating virtual care into primary care.

Conclusion: While the efforts that all levels of government have made to address the current crisis are encouraging, it is clear that further work is needed to ensure the long-term sustainability of our health care system and of our health care workforce.

Length and experience of staying in hospital postpartum during COVID-19: A convergent parallel mixed-methods study

Presented by: Rebecca Correia

All Authors*: David Kirkwood1, Aaron Jones2, Meredith Vanstone3, Caroline Mniszak4, Michelle Howard3, Rebecca Correia2, Sarah McDonald 5, Andrea Carruthers3, Devon Greyson4, Sujane Kandasamy6, Amie Davis3, Cassandra Kuyvenhoven3, Elizabeth Darling5*
Author Affiliations: *1ICES, McMaster University, Hamilton, Ontario, Canada, 2Department of Health Research Methods, Evidence, and Impact, McMaster University, Hamilton, Ontario, Canada, 3Department of Family Medicine, McMaster University, Hamilton, Ontario, Canada, 4School of Population and Public Health, University of British Columbia, Vancouver, British Columbia, Canada, 5Department of Obstetrics and Gynecology, McMaster University, Hamilton, Ontario, Canada, 6Department of Child & Youth Studies, Brock University, St. Catharines, Ontario, Canada*

Background and Objectives: Shortened hospital stays following vaginal or Caesarean births in recent years have been debated with regards to the safety and needs of birthing persons and newborns. Changes to organizational policies and clinical guidelines during the COVID-19 pandemic, as well as shifts in parental preference, may have prompted earlier discharge. We examined differences in postpartum hospital length-of-stay for births occurring during COVID-19 (quantitative) and explored how pandemic circumstances influenced postpartum hospital experiences (qualitative).

Approach: We conducted a cross-provincial, convergent parallel mixed-methods study in Ontario (ON) and British Columbia (BC). Our sample included persons with an in-hospital birth in ON from January 1 to March 31 in 2019, 2021, and 2022 (quantitative) and adults (≥18 years) who gave birth in ON or BC from May 1, 2020 to December 1, 2021 (qualitative). We linked multiple, population-based administrative datasets and developed multivariable linear regression models to examine their correlation to postpartum hospital length-of-stay. We conducted semi-structured interviews and analyzed them using qualitative description to understand experiences of postpartum hospitalization. Data was integrated during design and interpretation.

Results: Participants' postpartum hospital length-of-stay was significantly shorter in 2021 and 2022. On average, compared with 2019, stays decreased by 3.29 hours (95% CI: -3.58, -3.00; 9.2% reduction) in 2021 and 3.89 hours (95% CI: -4.17, -3.60; 9.0% reduction) in 2022. In our adjusted model, factors significantly associated with shorter stays included: giving birth during COVID-19 (in 2021 and 2022), neighbourhood social deprivation (more ethnocultural diversity), midwifery care, multiparity, and lower infant birth weight. From the interview data, we identified four interlinked factors that shaped participants' experiences giving birth and staying in hospital postpartum: their perceptions of COVID-19 infection risks, clinical care and medical services provided, hospital visitor policies, and their desire to leave or stay in hospital.

Conclusion: Postpartum hospital length-of-stays decreased during COVID-19 and birthing persons experienced unmet needs for postpartum services. Future research should investigate how postpartum services can be delivered to support patient satisfaction and optimal postpartum care when exogenous strains on the system (e.g., pandemics) constrain hospital resources.

New perinatal mental health diagnoses during COVID-19: A population-based, retrospective cohort study of birthing people in Ontario

Presented by: Rebecca Correia

All Authors: *Michelle Howard1, Devon Greyson2, Rebecca Correia3, David Kirkwood4, Liz Darling5, Aaron Jones3, Cassandra Kuyvenhoven1, Manisha Pahwa6, Hamideh Bayrampour7, Jessica Liauw8, Meredith Vanstone1*
Author Affiliations: *1Department of Family Medicine, McMaster University, Hamilton, Ontario, Canada, 2School of Population and Public Health, University of British Columbia, Vancouver, British Columbia, Canada, 3Department of Health Research Methods, Evidence, and Impact, McMaster University, Hamilton, Ontario, Canada, 4ICES, McMaster University, Hamilton, Ontario, Canada, 5Department of Obstetrics and Gynecology, McMaster University, Hamilton, Ontario, Canada, 6School of Physical and Occupational Therapy, McGill University, Montreal, Quebec, 7Department of Family Practice, Midwifery Program, University of British Columbia, University Endowment Lands, Canada, 8Department of Obstetrics and Gynecology, University of British Columbia, University Endowment Lands, Canada*

Background and Objectives: Global data indicate high rates of perinatal depression and anxiety during the COVID-19 pandemic. The mental health of pregnant and postpartum people in Canada may have worsened in response to stress about infection risks, insufficient prenatal care, strained relationships, social isolation, difficulties balancing caregiving and work responsibilities, and challenges obtaining childcare. The aim of this research was to compare incidence rates of mental health diagnoses among perinatal people in Ontario before and during the pandemic.

Approach: We conducted a population-based, retrospective cohort study by linking health administrative datasets at ICES. Eligible persons had a live, in-hospital birth from 01/01 to 03/31 in 2019, 2021, and 2022. These timeframes represent three COVID-19 phases with respect to provincial public health policy measures. We excluded people with a mental health diagnosis within two years of conception. We developed multivariable, modified Poisson models to control for sociodemographic and clinical factors. Using diagnostic codes and inpatient hospital records, we identified new onset of depression, anxiety, or adjustment disorder in two periods: antenatal (during pregnancy) and postpartum (≤12 months of giving birth).

Results: 72,242 persons gave birth within our timeframes of interest (2019, n=24,370; 2021, n=24,441; 2022, n=23,431). Significantly more people were diagnosed with depression, anxiety, or adjustment disorder during pregnancy in 2021 (n=927; 3.8%) and 2022 (n=825; 3.5%) versus 2019 (n=698; 2.9%; p<.0001). Postpartum diagnoses were significantly greater in 2021 (n=1,373; 5.6%; p<.0001) compared to 2019 (n=1,195; 4.9%) and 2022 (n=1,104; 4.7%). Antenatal diagnoses were significantly associated with study birth year, high residential instability and ethnocultural diversity, previous stillbirth, hypertension, and multiparity. Postpartum diagnoses were significantly associated with maternal age, specialty of prenatal care provider, use of assisted reproductive technology, delivery type, intensive care admission, and hospital readmission.

Conclusion: Significantly increased rates of antenatal and postpartum mental health diagnoses during the COVID-19 pandemic in Ontario signal potential effects of the pandemic and complex health and social risk factors that require further investigation. These data indicate the need for more mental health support for pregnant and postpartum people.

Describing family physicians with Care of the Elderly training or focused practice to care for older adults: A population-based retrospective cohort study

Presented by: Rebecca Correia

All Authors: *Meredith Vanstone1, Chris Frank2, Rebecca Correia3, Ruth Lavergne4, Steve Slade5, Henry Siu1, Aaron Jones3, Glenda Babe6, Andrew Costa3, David Kirkwood6*

Author Affiliations: *1Department of Family Medicine, Faculty of Health Sciences, McMaster University, Hamilton, Ontario, Canada, 2Department of Medicine, Division of Geriatric Medicine, Queen's University, Kingston, Ontario, Canada, 3Department of Health Research Methods, Evidence and Impact, Faculty of Health Sciences, McMaster University, Hamilton, Ontario, Canada, 4Department of Family Medicine, Dalhousie University, Halifax, Nova Scotia, Canada, 5College of Family Physicians of Canada, Mississauga, Ontario, Canada, 6ICES, McMaster University, Hamilton, Ontario, Canada*

Background and Objectives: Family physicians are central to caring for older adults and can seek additional training to enhance their competence or structure their medical practice to focus on this population. Family physicians with additional training or focused practice have not been classified in health administrative data, limiting our understanding of their individual and medical practice characteristics. We aimed to identify and describe family physicians with training and/or focused practice activities relevant to older adults.

Approach: We conducted a retrospective cohort study using multiple health administrative datasets at ICES for the calendar year, 2019. Data were linked using unique encoded identifiers. We identified family physicians with a "Care of the Elderly" Certificate of Added Competence using linked data from the College of Family Physicians of Canada and/or a focused practice billing designation using fee codes. We performed chi-square and Wilcoxon rank-sum tests to assess differences between family physicians and mapped their practice locations. We modelled factors associated with additional training or focused practice to care for older adults using unadjusted logistic regression.

Results: 242 of 14,123 family physicians had evidence of additional training or focused practice scope to better support older adults. These physicians mainly practiced in team-based models, exhibited comprehensive practice types, and increasingly billed for core primary care services. Factors significantly associated with greater likelihood of having additional training or focused practice relevant to caring for older adults included: physician demographics (i.e., female sex, community size, graduating from a Canadian medical school, community-level residential instability), primary care practice model (i.e., focused practice type), primary care activities (i.e., increasingly providing consultations, practicing in long-term care, referring patients aged ≥65 to psychiatry, billing for complex house call assessments, home care applications, and long-term care health report forms), and patient characteristics (i.e., increased age of non/rostered patients).

Conclusion: The family physician workforce with additional training or focused practice to care for older patients comprises a small group of providers who contribute to comprehensive primary care. These family physicians can be engaged as leaders to enhance geriatric competencies among all family physicians who increasingly deliver care to aging populations.

Management Decision-Making Practices on Technology Adoption in Long-Term Care: A Scoping Review

Presented by: Danielle Cruise & Mirou Jaana

All Authors*: Danielle Cruise1, Mirou Jaana1*
Author Affiliations: *1Telfer School of Management, University of Ottawa*

Background and Objectives: Canada's aging population has increased needs for admission to long-term care (LTC) homes, which lag significantly behind other areas of healthcare in relation to health information technology (HIT) adoption and implementation. There is limited knowledge about the decision-making practices in these organizations when considering new technologies, which may hinder advancement and transformation in this area. This project aims to identify the breadth and scope of available scientific evidence on HIT management decision-making practices in LTC.

Approach: Following the Joanna Briggs Institute (JBI) guidelines, we developed a scoping review that used a comprehensive search strategy in three databases (OVID Medline, Scopus, and CINAHL) covering the areas of: management decision-making; LTC homes; and HIT. Studies published in English that presented evidence on management decision-making practices related to HIT adoption in LTC homes were included. Two researchers extracted the relevant information from the articles using a coding scheme that was developed for the purpose of this project (93% interrater agreement); disagreements were resolved by a tiebreaker.

Results: Twenty studies (2008-2021), conducted in 7 countries (11 in the United States), mostly focusing on the adoption of electronic health records (40%) were found. Managers were the main stakeholders making HIT-related decisions (6 studies). Only three studies discussed specific factors influencing managers' decision-making (e.g., experience acquired from previous decision-making, characteristics of the LTC home, autonomy). Two studies found that transformational leadership styles were effective in HIT decisions. Facilitators and barriers were reported in 90% of the studies: facilitators included positive attitudes toward the use of HIT (8 studies), supportive organizational culture (7 studies), and increased communication between stakeholders (5 studies); barriers included the high cost of the technology (8 studies), inadequate staff training (6 studies), and lack of confidence in research data (4 studies).

Conclusion: Research evidence on HIT decision-making practices in LTC is scarce, presenting challenges to developing initiatives to support digital transformation in this environment. To benefit from HIT solutions, it is important to develop a framework that enable informed managers' decision-making in LTC homes on the right technology for the respective users.

Food Insecurity and Acute Care Utilization: A Systematic Review

Presented by: Rudra Dahal

All Authors: *Sandra Bergins1, Kamala Adhikari2, Karen Tang1, Rudra Dahal1*
Author Affiliations: *1Department of Medicine, Cumming School of Medicine, University of Calgary, Calgary, Calgary, Alberta, Canada, 2Provincial Population and Public Health, Alberta Health Services, Calgary, Alberta, Canada Department of Community Health Sciences, University of Calgary, Calgary, Alberta, Canada*

Background and Objectives: Food insecurity (FI) is inadequate access to food needed for normal growth, development, and maintenance of an active and healthy lifestyle, due to economic barriers. FI is associated with poor physical and mental health, including worse outcomes in chronic health conditions.. Existing research presents conflicting evidence regarding the relationship between FI and healthcare utilization. This systematic review aims to explore the association between FI and acute care utilization rates, including hospitalization and emergency visits department.

Approach: A systematic search was conducted, up to May 13, 2023, in the following e-databases: MEDLINE, EMBASE, PsycINFO, CINAHL and SocINDEX. We used a combination of subject headings, keywords, and synonyms for food insecurity and acute care utilization (hospitalization, emergency department (ED) visit, readmission, and hospital length of stay focusing on primary studies in adult populations. Study quality was independently assessed by two reviewers using the Newcastle-Ottawa Scale. Data were extracted from each study context, sample population characteristics, study design, and outcomes - including effect estimates, adjustment for confounders, and conclusions. Meta analysis was conducted for studies incorporating hospitalization and ED outcomes.

Results: The search strategy retrieved 8,299 citations for title and abstract screening. Of these, 92 were relevant to the research question and underwent full text screening; 35 met criteria for inclusion into the systematic review. Most studies were conducted in the USA (n=25 [71%]) and Canada (n=7 [20%]). The majority were cross-sectional study designs (n=30 [86%]) followed by cohort studies (n=5 [14%]). The most common outcomes studied were hospitalizations (n= 12[34%]), a composite of hospitalization and ED visits (n=14 [40%], followed by ED visits (n=6 [17%]). Three studies examined length of stay: one included readmission rates. Most studies found a positive association between FI, hospitalizations, and ED visits; a weaker relationship was observed with length of stay.

Conclusion: This study investigates the link between FI and acute care utilization. Even adjusting for factors including socioeconomic status and demographics, FI was associated with higher rates of hospitalization, ED visits, and readmissions. Identifying food-insecure individuals and deploying strategies to address their economic and food-related needs is a health system priority.

Our Virtual Reality: Supporting Shared Decision-Making for Virtual Care in Child and Adolescent Mental Health Services

Presented by: Miriam Daneff

All Authors: *Normand Carrey1, 2, Leslie Anne Campbell1, 2, Alexa Bagnell1, 2, Sharon Clark1, Miriam Daneff1, Jill Chorney1, 2*
Author Affiliations: *1IWK Health, 2Dalhousie University*

Background and Objectives: Virtual care may support access to child and adolescent mental health services for many. However, in supporting shared decision-making regarding virtual or in-person care, our previous research identified the potential for competition between the needs of clients and clinicians, and the demands of the health system. Our team seeks to identify sources of individual (within clients, caregivers, or clinicians) and interpersonal (between clients, caregivers, or clinicians) decisional conflict in using virtual mental health care.

Approach: We employed a pragmatic, multi-method approach using qualitative (e.g., interviews, field notes) and quantitative (e.g., demographic surveys) components. A purposive sample of clients ages 13-19 (n=13) and caregivers of youth ages 8-20 (n=14) participated in semi-structured key informant interviews to date. Interviews were coded to the Ottawa Decision Support Framework (ODSF) Decisional Needs Coding Manual and an analytic matrix was used to identify patterns and divergence across data. In the upcoming phase of this project, we will interview clinicians and staff and compare findings from clients and caregivers to identify opportunities to support shared decision-making.

Results: Clients and caregivers report that virtual care should remain an option for accessing mental health services, emphasizing the importance of choice and flexibility. However, few clients and caregivers reported engaging in shared decision-making with their clinician. Decisions, when possible, were often driven by client preferences.

Clients and caregivers had difficulty identifying their needs for supporting a shared decision; when asked, they acknowledged the roles of social pressure, difficult decisional roles, inadequate self-efficacy, inadequate information, inadequate instrumental help, personal needs, and clinical needs. Clients and caregivers spoke to the importance of the role of clinicians in initiating conversations about treatment modality and identifying and balancing needs.

Finally, caregivers want to be part of the shared decision-making process; however, adolescent clients discussed potential challenges in involving caregivers.

Conclusion: Shared decision-making places the needs of clients and caregivers at the centre of care. Supporting shared decisions may require descriptions of the implications of treatment modalities presented in different formats to accommodate varying needs and preferences. Individuals may need time to digest information and flexibility to change modalities.

A cohort study: an examination of high emergency department utilization during the 2021/2022 fiscal year of the COVID-19 pandemic among Ontarians who have a history of homelessness

Presented by: Harmanvir Dhaliwal

All Authors*:* *Bhavneet Bhangu1, Iwona Bielska2, Kelly Cimek3, Harmanvir Dhaliwal1, Jean-Eric Tarride1*
Author Affiliations: *1McMaster University, 2Jagiellonian University, 3Ontario Health*

Background and Objectives: Individuals with a history of homelessness have unique health needs that are inadequately addressed through services available to them. This requires them to frequently visit the emergency department (ED). However, their unique needs and trends of ED use during the pandemic have not been sufficiently explored. Thus, the study aimed to examine characteristics and patterns of utilization among individuals with a history of homelessness in Ontario in 2021/2022.

Approach: Data from 2020/21 were abstracted from the National Ambulatory Care Reporting System (NACRS), Client Health and Related Information System (CHRIS), Discharge Abstract Database (DAD) and Ontario Mental Health Reporting System (OMHRS) through Integrated Decision Support (IDS). Individuals with frequent ED visits in southern Ontario, defined as having ≥5 ED visits per year, were included. The data were analyzed and presented in aggregate form based on the patient demographics, frequency of visits, and diagnostic category.

Results: A total of 1,076 individuals made 15,066 visits to the ED during this year with an average of 14 visits per person (SD: 26, Median: 8, IQR: 7). Of the visits studied, 1,705 (11.3%) resulted in hospitalizations with an average of 1.6 hospitalizations per person (SD: 2, Median: 1, IQR: 2). About 18.7% of these individuals did not have a primary physician and under 16.9% were receiving home care services. The majority of these individuals presented with a discharge diagnosis of substance abuse (36.7%) or mental and behavioural disorders (35.1%). Moreover, 934 of these individuals (86.8%) presented with a co-morbid mental health or substance abuse diagnosis, including 27.5% who had a co-morbid schizophrenia diagnosis.

Conclusion: Individuals with a history of homelessness often have frequent use of emergency services mainly for mental health and substance abuse diagnoses. This indicates a need to improve the availability and accessibility of mental health and addiction services in outpatient and community-based settings by improving upon existing health frameworks.

An Intersectional Approach to Addressing Discrimination and Structural Inequities Among Pregnant Individuals in a Contemporary Population: A Cross-Sectional Study

Presented by: Shazia Dharamsi

All Authors: *Shannon Ruzycki1, 2, Shazia Dharamsi1, 3, Sofia Ahmed2, 4, Amy Metcalfe1, 2, 3*
Author Affiliations: *1Department of Community Health Sciences, Cumming School of Medicine, University of Calgary, Calgary, Alberta, Canada , 2Department of Medicine, Cumming School of Medicine, University of Calgary, Calgary, Alberta, Canada, 3Department of Obstetrics & Gynaecology, Cumming School of Medicine, University of Calgary, Calgary, Alberta, Canada , 4Faculty of Medicine and Dentistry, University of Alberta, Edmonton, Alberta, Canada*

Background and Objectives: Pregnant individuals may be vulnerable to discrimination due to existing social stigma and cultural norms surrounding pregnancy and motherhood, which can be exacerbated due to gender, race, or other aspects of their identity; however, it is unclear how intersecting identities overlap and interact to shape peoples' everyday experiences. The purpose of this study was to compare the prevalence and experiences of discrimination among pregnant individuals with diverse intersectional identities.

Approach: This secondary analysis used baseline data from 1,605 participants enrolled in a longitudinal pregnancy cohort study, the P3 Cohort Study. Latent class analysis was applied to identify different subgroups within the population based on combinations of their social positions and identities (i.e., race, gender expression, emotional health, physical health, education, income, disability, chronic illness, and age). Perceived discrimination was assessed via the Everyday Discrimination Scale (EDS), and linear regression was performed to compare the frequency, chronicity, and overall number of discriminatory encounters between subgroups.

Results: Utilizing latent class analysis, the following four subgroups emerged: (1) Mostly Privileged and Healthy; (2) Somewhat Privileged with Chronic Conditions; (3) Somewhat Privileged, Predominantly Racialized; (4) Indications of Emotional/Chronic Health Conditions. Class 2 (βfrequency = 0.7, $p = 0.001$; βchronicity = 17.2, $p < 0.001$) and Class 4 (βfrequency = 2.0, $p < 0.001$; βchronicity = 31.5, $p < 0.001$) were positively associated with both the frequency and chronicity of discrimination experiences relative to Class 1. Additionally, Class 2 (βsituations = 0.3, $p = 0.002$), Class 3 (βsituations = 0.5, $p = 0.010$), and Class 4 (βsituations = 0.7, $p < 0.001$) were positively associated with the total number of discrimination situations relative to Class 1.

Conclusion: Those with multiple marginalized identities exhibited higher overall EDS scores in each category. This analysis highlights the importance of intersectionality by demonstrating how multifaceted identities quantitatively contribute to experiences of discrimination in pregnant individuals.

Incidence of Hysterectomy Among Diverse Intersectional Identities: A Cohort Study

Presented by: Shazia Dharamsi

All Authors: *Amy Metcalfe1, 2, 3, Shazia Dharamsi1, 2, Anna Funk1, 2, Kathleen Charlong1, 2, Nikki Stephenson2, Erin Brennand1, 2, 4, Taylor Hughes1, 2*
Author Affiliations: *1Department of Community Health Sciences, Cumming School of Medicine, University of Calgary, Calgary, Alberta, Canada , 2Department of Obstetrics & Gynaecology, Cumming School of Medicine, University of Calgary, Calgary, Alberta, Canada , 3Department of Medicine, Cumming School of Medicine, University of Calgary, Calgary, Alberta, Canada, 4Department of Surgery, Cumming School of Medicine, University of Calgary, Calgary, Alberta, Canada*

Background and Objectives: Hysterectomy is one of the most common surgical procedures in the United States. Hysterectomy incidence has been independently associated with certain demographic factors. However, it is not clear how the fuller picture of a person's identity (e.g., considering multiple demographic factors simultaneously) influences risk of hysterectomy. Thus, the study objective was to explore if hysterectomy incidence differed by intersectional identity based on insurance type, race/ethnicity, socioeconomic status, and body mass index (BMI).

Approach: This secondary analysis used data from a multicenter, multiethnic, community-based prospective cohort (the Study of Women's Health Across the Nation) in the United States that took place from 1995 to 2008. Hysterectomy incidence, defined as the presence or absence of hysterectomy at any point during the study follow-up period, was assessed annually during a follow-up period of 10 years. Various groupings of structural factors (insurance) and individual factors (race/ethnicity, BMI, education status) contributed to identifying 36 intersectional identities, and the risk of hysterectomy was calculated for each group.

Results: 2,185 people were included in our analysis, of whom 197 (9.0%) had a hysterectomy. The highest overall risk was observed in Black individuals who had private insurance, no college degree, and a BMI ≥30 (15.1%; 95% confidence interval, 10.4-21.0). There were significant differences in hysterectomy incidence between many intersectional identity groups. The highest observed risk difference was between Black individuals with a BMI ≥30 when compared to Hispanic individuals with a BMI <30, both of whom had private insurance and no college degree (12.9; 95% confidence interval, 6.3-19.5).

Conclusion: Hysterectomy incidence differed by intersectional identity in this study, indicating potential conscious or unconscious biases related to power, positionality, and privilege in decision making surrounding this surgical procedure. Further research should explore indications and necessity of hysterectomy by intersectional identity.

Exploring Interprofessional Primary Care (IPPC) Teams' Impact on Chronic Disease Management: A Narrative Review on Guiding Features and Reported Outcomes

Presented by: Melanie Dissanayake

All Authors*:* *Sheila Moodie1, Carri Hand1, Emma Wardhaugh1, Shannon Sibbald1, Melanie Dissanayake1*
Author Affiliations: *1Western University*

Background and Objectives: Interprofessional Primary Care (IPPC) teams, are a recommended approach to support chronic disease management in primary care. However, there is a paucity of literature around the organizational and interpersonal features (guiding features) that facilitate successful IPPC outcomes, and specifically what these outcomes entail for chronic disease management. Therefore, the aim of this review was to examine the guiding features, and clinical, humanistic, and economic outcomes related to IPPC teams and chronic disease management.

Approach: A narrative review of the literature was conducted following the Joanna Briggs Institute (JBI) criteria. The databases MEDLINE, Scopus, CINAHL, Embase, and The Cochrane Database of Systematic Reviews were searched for full-text English articles from 2000-2023. Primary research studies evaluating outcomes related to IPPC teams providing chronic disease management interventions were included. The review looked at the guiding features characteristic of IPPC interventions, as well as clinical, humanistic, and economic outcomes.

Results: 24 studies on IPPC interventions were included and most (54.2%) were conducted in the U.S.A. Remaining studies were conducted in Canada (38%) and Australia (8%). The research design of the studies included qualitative (25%), cross-sectional (21%), prospective cohort (17%), retrospective cohort (13%), randomized control trial (13%), retrospective chart review (8%) and observational (4%). 12 studies reported clinical outcomes, 15 reported humanistic outcomes, and 3 studies reported economic outcomes. IPPC teams were impactful in improving chronic disease management outcomes for patients and satisfaction outcomes for providers such as higher levels of collaboration, better knowledge exchange, building trusting relationships. Studies also reported specific interactional components (such as communication, knowledge sharing, and shared decision-making) and practice features (such as team meetings, patient education, asynchronous care) that facilitated interventions.

Conclusion: Implementation of interprofessional collaboration is complex owing to the complexity and variety of primary care contexts. The current review offers information for patients, providers, and policy related to the facilitating factors and outcomes related to IPPC interventions for chronic disease.

The First Nation Community Experiences with the SOAR Research Program: Improving Type 2 Diabetes Prevention and Management

Presented by: Melanie Dissanayake

All Authors: *Romina Pace1, Stewart Harris2, Melanie Dissanayake2*
Author Affiliations: *1McGill University, 2Western University*

Background and Objectives: Indigenous peoples in Canada are considered the highest-risk populations for type 2 diabetes mellitus (T2DM). Quality improvement (QI) strategies are considered effective interventions to improving T2DM health outcomes. However, there is sparse data on the experience of First Nation communities with QI initiatives and if they consider such initiatives beneficial. The purpose of this study was to understand experiences associated with the implementation of the SOAR QI program to improve prevention and management of T2DM.

Approach: A qualitative study was conducted, guided by the principles of community-based participatory research (CBPR). In-depth, semi-structured interviews were held with QI team members and key contacts, in person and through videoconference with two First Nations communities. Areas of exploration focused on program development, impacts of the program, cultural relevance, individual participation experiences, and lastly the impact of SOAR on patient outcomes, experiences, organizations, and the community. Interviews were de-identified and transcribed for data analysis. An inductive, data-driven approach to analysis was conducted in accordance with Braun and Clarke's (2006) six step process.

Results: 10 interviews were conducted and emerging themes from the data analysis were organized into two categories, namely facilitators and barriers. Four subthemes were identified. Two subthemes emerged under the category of facilitators (cultural relevance, and partnership building). Two subthemes emerged under the category of barriers, (workload burden, role ambiguity). This study highlighted the necessity of implementing diabetes QI strategies that foster cultural sensitivity and provide opportunities for partnership building, to strengthen community relationships. The study also highlighted the importance of diminishing role ambiguity, and increased workload burdens, which can hinder the successful implementation of QI programs long-term.

Conclusion: Study findings can be utilized to improve future adaptations of SOAR and other diabetes First Nations focused QI strategies, to benefit outcomes relative to T2DM care. Findings can also inform the design, practices, and policies of such QI interventions in support of the spread and sustainability of the intervention long-term.

The effects of the Covid-19 pandemic in Quebec: an analysis of healthcare workers and patient care trajectories.

Presented by: Bile Yacouba Djedou

All Authors: *BILE YACOUBA DJEDOU1, Maude Laberge1*
Author Affiliations: *1Université Laval*

Background and Objectives: The patient care trajectory is closely linked to the well-being of healthcare workers. Deterioration in their mental and physical health can affect the quality of care they provide. In Quebec, the Covid-19 has had a profound impact on both healthcare workers, particularly in terms of their well-being.
The aim of this study is to report on the well-being of healthcare workers in Quebec during period from the first to the fourth waves of the COVID-19

Approach: Our analyses are based on data from Statistics Canada's Survey of Health Care Workers' Experiences During the Pandemic (SHCWEDP), collected between September 2 and November 12, 2021, with a sample of 1,175 Quebec healthcare workers. We used descriptive statistical methods to characterize the sample and the distribution of study variables, followed by logistic regressions for each outcome measure.

Results: Our results indicate self-reported prevalences of mental health conditions, anxiety, and depression of 38%, 21% and 13% respectively within the study sample. In addition, the results reveal that age, workload, emotional distress, interpersonal conflict, and stigma are significant risk factors for mental health problems among healthcare workers. Gender, existing health problems, emotional distress and stigmatization appear to be significant predictors of anxiety. Being a physician, and reporting emotional distress or stigma are associated with an increased risk of depression.

Conclusion: These findings provide insights for the development of policies and practices aimed at ensuring the mental and physical health of healthcare workers, which could improve the quality of care and strengthen the healthcare system's preparedness to face future challenges.

Informing policy to support regional health human resources planning for integrated care models: Perspectives of health leaders and community partners

Presented by: Catherine Donnelly

All Authors: *Joan Almost1, Patti O'Brien1, Annie Webber1, Chris Simpson1, Joan Tranmer1, Raquel Ramos1, Will Lakusta2, Vaska Jones1, Alisa Robinson1, Genevieve Pare1, Anne O'Riordan3, Morgan Slater1, Catherine Donnelly1, Kim Morrison3, Jane Philpott1*
Author Affiliations: *1Queen's University, 2Ontario Health, 3Frontenac Lennox Addington Ontario Health Team*

Background and Objectives: Integrated models of care such as Ontario Health Teams support the needs of their local populations by bringing health care providers and sectors together to deliver seamless care. To address local population health needs, health human resource (HHR) planning must align with these models. However, there is sparse evidence to support local health workforce planning. The overall aim of this study was to inform policy to support regional HHR planning to address population needs.

Approach: As part of a larger study using a single case study design, a qualitative descriptive approach as used to understand the contextual factors that influence regional planning and application of an HHR planning framework driven by population health needs. The Frontenac Lennox and Addington Ontario Health Team (FLA-OHT) served as the case. Key informant interviews were conducted with FLA-OHT leaders, a range of health care providers, and community members. Interviews were transcribed verbatim and thematic analysis was used. Three members of the team conducted the analysis, developing a code book with regular meetings to encourage reflexivity

Results: Fourteen individuals were interviewed. Four themes were identified: i) Flying Blind included a reactive planning focus, supply and demand issues resulting in competition, lack of collaborative planning and insufficient resources including data, time, staff, tools, governance and funding; ii) Driving Forces included external priorities and crises or changes in models of care, service delivery or practice; iii) (In)Capacity for Change focused on funding models, union and contracts, a focus on one's own needs, challenges with exploring changes to service delivery; and iv) Innovative Solutions. Solutions highlighted the need for: 1) standardized, granular and current data; 2) sharing of resources and a regionalized workforce; 3) appropriate resources including staff with sufficient time and skills; and 4) inclusion of, and resources for, patients, informal caregivers and volunteers.

Conclusion: This study outlined the contextual factors that influence planning at a regional level, including the need to work collaborative and pro-actively across sectors and organizations. Changes at federal, provincial and regional levels are required to ensure effective HHR planning in integrated care models and a future proofed workforce.

Exploring the Lived Experiences of Women with Chronic Obstructive Pulmonary Disease

Presented by: Madeline Dougherty

All Authors: *Shannon L. Sibbald1, Madeline Dougherty1, Elaine Zibrowski1*
Author Affiliations: *1Western University*

Background and Objectives: Currently, there are many barriers to women seeking diagnosis and treatment for COPD. These barriers include greater under-diagnosis and fewer medical consultations. Often thought of as a "male smoker's" disease, in the past decade there has been a sharp increase in the number of COPD cases in women. This research will aim to explore the lived experiences of women with COPD to support the development of solutions to providing optimal and equitable care for women.

Approach: This study used van Manen's hermeneutic phenomenological methodology to explore the lived experiences of women with COPD guided by a critical theory paradigm. This study was conducted using semi-structured one-on-one interviews. The analysis was guided by van Manen's thematic analysis to uncover the themes of the phenomenon being studied. The thematic analysis was done using methods common to van Manen's phenomenology including immersion, coding of themes, and a rich description of the phenomenon. All through this analysis process it was acknowledged that our pre-understanding and previous experiences are a prerequisite for the topic that was explored.

Results: In the preliminary results participants described varying experiences with their diagnosis. This included dismissal of symptoms such as persistent cough and dyspnea, multiple differential diagnoses of bronchitis, pneumonia, and cardiac issues, and a reluctance to confirm COPD as the diagnosis. Participants also described a lack of information coming from their primary physicians upon diagnosis and throughout follow-up appointments. Concerning treatment, one participant described their experience when talking to her doctor about side effects of her puffer. The participant said the doctor completely ignored her and felt offended by her claims. Another participant said she learned to properly administer her puffer at a support group instead of her physician. Overall, most participants didn't identify these experiences as inequities, but wished things would have been different.

Conclusion: Without access to information and timely diagnosis, women with COPD are unable to improve their quality of life and receive the care they deserve. By exploring the experiences of women with COPD, this research can help support the development of solutions to allow women to receive equitable care for COPD.

What Matters Most When Visiting a Rapid Access Addictions Medicine (RAAM) Clinic in Canada: A National eDelphi Study Amongst People Living with an Alcohol Use Problem

Presented by: Mackenzie Dowson

All Authors*: Brianne Peters1, Surapon Nochaiwong2, Amelia Palumbo3, 4, Karen Cohen5, Llisa Morrow6, Gord Garner1, Sarah Konefal7, Melanie Willows8, 9, Kim Corace8, 10, Dianna Wolfe3, 11, Mary Bartram12, Nathoen Chaiyakunapruk13, Kelly Suschinsky8, Andrew Pump1, B*

Author Affiliations: *1Community Addictions Peer Support Association , 2Faculty of Pharmacy, Chiang Mai University , 3Clinical Epidemiology Program, Ottawa Hospital Research Institute (OHRI) , 4Psychology and Health Research Group (PaHRG), OHRI, 5Canadian Psychological Association , 6Leger, 7 Canadian Centre on Substance Use and Addiction, 8 Substance Use and Concurrent Disorders Program, The Royal Mental Health Center, Ottawa , 9Department of Psychiatry, uOttawa, 10Insitute of Mental Health Research , 11Ottawa Methods Centre, OHRI, 12Stepped Care Solutions , 13Department of Pharmacotherapy, University of Utah , 14Harrison School of Pharmacy, Auburn University , 15School of Epidemiology and Public Health, uOttawa*

Background and Objectives: Rapid Access Addiction Medicine (RAAM) clinics are low-barrier, walk-in clinics that offer services for people who have concerns about their substance use, including alcohol use problems. RAAM clinics can be found across Canada. However, not all RAAM clinics offer equivalent resources. The current study explores the importance of various components of care from the perspectives of people who have accessed or would consider accessing a RAAM clinic in Canada for help with alcohol use concerns.

Approach: Participants were recruited using a Canadian online-panel company, Leger. Eligible participants were adults living in Canada and scored eight or higher on the Alcohol Use Disorders Identification Test (AUDIT). Participants responded to items in rounds of an eDelphi survey, with progressive rounds seeking to reach a consensus on the most important components of care at a RAAM clinic. Thirty- eight components were organized into five domains of healthcare accessibility: 1) approachability; 2) acceptability; 3) availability and accommodation; 4) affordability; 5) appropriateness. Ranking was conducted on a 5-point scale with options anchored from “not at all important” to “critical.”

Results: Consensus was defined a-priori as 75% or greater ranking agreement. It was pre-determined that the survey would close after 10 components reached consensus or following four rounds. After three rounds, participants (n= 89) reached consensus for 10 components of care. Two components were approachability factors; four were acceptability factors; one was an availability and accommodation factor; one was an affordability factor, and one was an appropriateness factor. Additionally, analyses revealed that some demographic characteristics were associated with item rankings. Participants who spoke languages other than English ranked language availability highly (r =-.33, p =.001), younger participants ranked virtual care availability highly (r = -.29; p =.005) and participants with diverse gender identities and sexual orientations ranked respect of diverse identities highly (r =.28; p = .006).

Conclusion: Findings point to client-prioritized features of Canadian RAAM clinics that could be used as a basis for continuing to improve the services provided to people living in Canada experiencing problems with alcohol use.

An Analysis of Clinical-Administrative Co-Management Practices in Family Medicine Groups

Presented by: Savannah Dubé

All Authors: *Élisabeth Martin1, Savannah Dubé2, Matthew Menear1, Simon Coulombe1, Genève Caron3, Jean-Sébastien Paquette1, Maude Laberge1, Marie-Ève Poitras3, Mireille Luc3, Angélique Auger-Gosselin3, Mylaine Breton3*
Author Affiliations: *1Université Laval, 2VITAM Research Centre for Sustainable Health, 3Université de Sherbrooke*

Background and Objectives: In primary care, new governance models are emerging in which medical leaders and health administrators are working more collaboratively in the clinical-administrative management of clinical teams (i.e. co-management). Such models are increasingly observed in Quebec's Family Medicine Groups, though actual co-management practices can vary widely across clinics. We aimed to explore in-depth these clinical-administrative models of co-management and describe the advantages, challenges, and impacts of co-management practices established in different Family Medicine Group settings.

Approach: A multiple case study approach was employed. We used purposeful sampling to select six Family Medicine Groups with co-management practices situated in two health regions (3 sites in the Capitale-Nationale region, 3 in the Estrie region). Sites were diverse with respect to their funding model (private vs. public), their academic status (affiliated or not to the university), and size. Data collection is near completion and has involved 23 individual and 3 group semi-structured interviews with key actors (e.g. medical directors, health administrators) involved in the management of the clinics. Interviews are currently being analyzed using a rapid thematic analysis approach.

Results: Analyses are ongoing but will be completed by conference time. Preliminary results suggest that co-management practices are more complex than widely thought, extending beyond the medical director-health administrator dyad to include other participants in co-management. The perceived benefits of these models primarily revolved around the ability to share management challenges and bring together clinical and management expertise, contributing to perceived overall efficiency and fostering innovation. As for challenges, they existed at different levels but involved communication challenges, issues related to individual characteristics, and challenges within the organizational or broader context. In terms of overall impacts, these extended beyond the benefits to participants and were perceived to have a direct influence on the clinic's culture and the quality of services provided to the population.

Conclusion: This study's findings provide important new insight into the clinical-administrative co-management practices within Quebec's Family Medicine Groups. These insights will be shared with ministry partners to inform primary care governance frameworks in the province and hopefully help spread good management practices and enhance the performance of these primary care teams.

"Process mining", a business process analysis method applied to the study of the evolution of post-COVID-19 condition within the Biobanque québécoise de la COVID-19

Presented by: Juliette Duc

All Authors: *Juliette Duc1, 2, Amin EMAD3, Jean-Frédéric Boulianne2, 4, Simon Rousseau5, Delphine Bosson-Rieutort1, 2*
Author Affiliations: *1École de Santé Publique de l'Université de Montréal (ESPUM), 2Centre de Recherche en Santé Publique (CReSP), 3Université McGill, 4HEC Montréal , 5Institut de recherche du centre universitaire de santé McGill*

Background and Objectives: The COVID-19 pandemic has resulted in a growing number of individuals experiencing long-lasting symptoms, called post-COVID-19 condition (PCC), even among non-severely cases. PCC presents a significant public health concern, with individuals persistently symptomatic at 12 and 18 months. Therefore, identifying vulnerable populations early is crucial to guide them toward appropriate care. Our objective is to use process mining and BQC19 to model PCC-related symptom trajectories and study the relationship between patients' symptoms trajectories and endophenotypes.

Approach: We will analyze data from 2,762 patients in the "Biobanque québécoise de la COVID-19" (BQC-19), recruited between April 2020 and March 2023. Participants include severely and mildly ill individuals with long-lasting symptoms, followed up for two years. Variables include demographic, anthropometric, clinical, pharmacological, laboratory results, vaccination, molecular and administrative data. Using agglomerative clustering and molecular phenotyping data, we will identify and describe endophenotypes, representing specific sets of molecular characteristics within subgroups. We will apply process mining to model PCC-related symptom trajectories and explore their variations based on disease severity and endophenotypes. Analyses and data management will be performed with R.

Results: The main results will consist of process maps, representing the trajectories. Symptoms will be depicted as nodes, reflecting the frequency of patients who experienced each one. The edges between symptoms will indicate the frequency of patients experiencing different successions of symptoms, while loops will represent consecutive occurrences. Additionally, we will display the median duration between two symptoms. Similar process maps will be created for laboratory results, healthcare events, and multiomic data, for the entire population and for each endophenotype. This approach will enable us to identify the overall succession, diversity, and duration of symptoms, laboratory results, healthcare events, and multiomic data, to highlight the deviations experienced by certain patients, and compare if integrating the phenotypes is the most appropriate method to predict patients' trajectories.

Conclusion: To date, process mining has never been applied to molecular and clinical data. This innovative approach aims to provide a rich and detailed overview of the various trajectories of individuals experiencing long-lasting symptoms, optimizing resource allocation, therapeutic strategies, and informing the ongoing implementation of the COVID-L clinic network in Quebec.

Work Preferences Winnipeg Emergency Department nurses: An interpretive descriptive study

Presented by: Wendy Ducharme

All Authors: *Malcolm Doupe1, Sonia Udod2, Wendy Ducharme2*
Author Affiliations: *1MCHP, 2University of Manitoba*

Background and Objectives: While multiple tools and frameworks exist to project current and projected healthcare workforce supply, most exclude how provider demographic and work participation preferences (WPP) influence these scenarios. This case study will 1) describe the past and present work preferences of nurses employed in Winnipeg Emergency Departments (ED) between 2021-2024, and 2) explore participants' perceptions of factors influencing their work preferences including their mutability, to improve nurse retention and safe, quality care.

Approach: Participants will be recruited with 15+ years, 2-14 years, and <2 years ED nursing experience. Guided by Phillips et al. (2020) and Goldsworthy (2015), a questionnaire to document key participant demographics, WPP, and intention to stay (ITS) will be employed. Questionnaire findings will guide group-specific, semi-structured interviews to explore contextual, workload, or cohort factors (Walker & Clendon, 2017) influencing their current WPP choices and changes over time.

Thorne's (2016) qualitative interpretive description methodology will be utilized. Descriptive statistics will be generated from the questionnaire data. Data collection and analysis will occur simultaneously to enable the integration of emerging knowledge.

Results: While this study is in the planning stages, findings may offer insight into capacity and supply generation. It will describe three cohorts of nurses' WPP and identify changes over time. Factors contributing to WPP will be identified and categorized which may inform retention initiatives ultimately influencing patient and organizational outcomes.

These findings will be relevant to 1) provincial policymakers for consideration of the impact on workforce planning projections, 2) service delivery organizations in staffing, rotation, and work environment actions, and 3) future research.

The study approach could be extended to other departments and health disciplines to create a robust understanding of WPP and generate knowledge to inform future projection models. Dissemination of results to the service delivery organizations and provincial policymakers will be prioritized.

Conclusion: The prevailing anecdotal narrative is that generational differences in workforce participation intention are negatively impacting nursing capacity. By understanding the current state, changes over time, and contributing factors, decision-makers can determine to what degree this may impact system planning projections and local department activity to recruit and retain nurses.

A Budget Impact Analysis of the New Staffing Policy in Ontario’s Long-term Care Homes

Presented by: Karen El Hajj

All Authors*: Carrie McAiney1, 2, Paul Stolee1, Karen El Hajj 1, Lori J. Curtis 1*
Author Affiliations: *1University of Waterloo, 2Schlegel-UW Research Institute for Aging, Waterloo, Canada*

Background and Objectives: In response to quality of care issues in long-term care (LTC) homes highlighted by the pandemic, the Ontario government introduced a new minimum LTC staffing standard. The policy takes effect in March 2025, requiring Ontario’s LTC homes to provide an average of four hours of direct care per resident per day, and 36 minutes of allied health professional care. This study employs a budget impact analysis to estimate the policy’s impact on the government’s budget.

Approach: To obtain the data for the budget impact analysis, a systematic grey literature search is performed. The search provides data on wages for LTC workers (Personal Support Workers, Nurses), suggested staffing mix, government budgets, plans, and initiatives to achieve incremental increases in the availability of LTC beds (for example, the government of Ontario’s announcement of 30,000 new beds to be introduced). The analysis takes a public payer perspective since Ontario’s health system is publicly funded, over a 5 year period, with no discounting.

Results: The budget impact analysis will include a baseline scenario to showcase the government’s budget without the introduction of the staffing policy in LTC. In addition to the baseline case, a set of different scenarios will reflect varying assumptions with data collected from the grey literature search. Model parameters include demographic changes, such as the change in the number of LTC residents per year, the increase of available beds per year, waitlist changes, and the average length of stay in LTC. Additional model parameters include the increased spending to train and staff LTC homes. The assumptions include the potential growth in wages of LTC workers as the policy is set in place, reflecting an increase in workforce demand.

Conclusion: This budget impact analysis provides an understanding on the effects of a new staffing policy on the Ontario government’s budget. Subsequent research will examine the policy’s potential effects on LTC and on labour force movements on other health care sectors such as home care.

Barriers Faced by International Medical Graduates - A Mixed Studies Review

Presented by: Reem El Sherif

All Authors: *Reem El Sherif1, Gary Garber1, Jacqueline Fortier1*
Author Affiliations: *1CMPA*

Background and Objectives: International medical graduates (IMGs) play an important role in the health care system and constitute up to a quarter of the physician workforce in Canada. Reports on equity, diversity, and inclusion challenges among physicians have identified barriers unique to IMGs, including higher medicolegal risk. The goal of this review was to explore barriers faced by IMGs during their practice from their perspective, from the perspective of other professionals, and when compared to domestic medical graduates.

Approach: A mixed studies literature review was conducted using a convergent synthesis design integrating qualitative and quantitative data. Adhering to PRISMA 2020 guidelines, the review encompassed patient safety, medicolegal risk, and barriers. Searches were conducted by a librarian in Medline and ERIC, from inception to June 13th, 2023. DistillerSR was used for record selection, with data extraction and synthesis conducted in NVivo 12 Plus, covering study characteristics, barriers, medicolegal outcomes, work environment, and proposed interventions.

Results: Of the 740 records screened, 54 were included in the analysis. The majority comprised empirical studies (57% quantitative, 13% qualitative, 30% literature reviews). IMGs were more likely to specialize in primary care and work in underserviced areas. Their quality of care was reported as similar to, or better than, domestic medical graduates. Job satisfaction among IMGs was consistently lower, influenced by discrimination, stress, and burnout. Discrimination, often language-related, emerged as a significant barrier, affecting communication with patients and colleagues. IMGs faced bias based on race, ethnicity, or the "IMG" label. Moreover, increased medicolegal risks were noted, with higher discipline rates for IMGs in some countries. Cultural differences and language barriers posed challenges in patient and colleague interactions.

Conclusion: The review highlights persistent barriers faced by IMGs in their practice, including discrimination, language difficulties, and cultural disparities, which may impact job satisfaction, stress levels, and medicolegal risk. Addressing these issues is essential for formulating inclusive health policies that optimize the contributions of IMGs in diverse healthcare settings.

Uptake Pattern of Flash Glucose Monitoring Systems Among Older Adult Residents of Ontario, by Immigrant Status

Presented by: Mary Elias

All Authors: *Baiju Shah1, 2, 3, 4, Tara Gomes1, 3, 5, Maria Chiu3, 6, Sara Allin3, 7, Mary Elias3*
Author Affiliations: *1 Institute for Clinical Evaluative Science, 2Sunnybrook Health Sciences Centre, 3University of Toronto , 4Sunnybrook Research Institute, 5Li Ka Shing Knowledge Institute of St. Michael's Hospital, 6Pediatric Oncology Group of Ontario , 7North American Observatory on Health Systems and Policies*

Background and Objectives: To improve access to diabetes management devices, the Ontario Drug Benefit (ODB) program announced coverage for Flash Glucose Monitoring (FGM) systems effective September 16, 2019 for ODB eligible patients who were insulin-requiring. However, even within the context of a publicly funded program, access to prescription benefits is complex and can be inequitable. The objective of this research was to determine the uptake pattern of FGM systems among older adult residents of Ontario, by immigrant status.

Approach: Using administrative data, we conducted a population-based, cross-sectional study of Ontarians aged 66 years and older on insulin between September 16, 2019, and March 31, 2023. The primary outcome of interest was the number and population-adjusted monthly rate of unique individuals who received a publicly funded FGM reimbursed by the ODB. We examined the characteristics of individuals who received a FGM by immigrant status (those who immigrated to Canada on/after 1985) vs. long-term residency (those residing in Canada prior to 1985), including demographic factors, neighbourhood marginalization factors and health care utilization factors. We compared the groups using standardized differences.

Results: A total of 13,970 immigrants and 77,189 long-term residents were dispensed a FGM. We observed that the rate of new users under ODB funding was 37 per 1000 for immigrants and 49 per 1000 for long-term residents in the first month (September 2019) of funding. The rates peaked at 95 new users per 1000 for immigrants and 91 per 1000 for long-term residents in October 2019, before sharply declining and stabilizing after April 2020. Results of the descriptive analysis showed that immigrants and long-term residents were different on several factors. For example, immigrants who received FGM were younger, more likely to reside in neighbourhoods with greater racialized and newcomer populations and more likely to have received a non-insulin diabetes agent prescription in the year prior.

Conclusion: Although both immigrants and long-term residents had significant uptake of FGM in the first month of funding, we see a greater uptake among long-term residents compared to immigrants. After the first month of funding, differences between groups are small, suggesting minimal barriers to accessing this novel technology under the ODB.

Discovering and Dreaming: Long-term Care Healthcare Aide Perceptions of Structural Empowerment

Presented by: Jocelyn Elias

All Authors: *Malcolm Doupe1, W. Dean Care1, 2, Jocelyn Elias1, Judith Scanlan1*
Author Affiliations: *1University of Manitoba, 2Brandon University*

Background and Objectives: Chronic and emergent care challenges have led to diminished quality of care in many long term care (LTC) facilities during the COVID-19 pandemic and beyond. Healthcare aides (HCAs) occupy a strategically important role in achieving improved resident care outcomes yet continue to experience disempowerment through authoritarian working conditions. This study provides a robust description of HCA perceptions of how organizational structures have empowered or disempowered them and the dream state for such structures.

Approach: An exploratory qualitative design informed by Kanter's theory of structural power was used, within an appreciative inquiry (AI) framework. AI encompasses an optimistic egalitarian approach towards organization change and allowed HCA voices to be heard, protected, and valued. Convenience sampling was used to recruit ten HCAs from multiple LTC sites in a Western Canadian province. Eligibility included working at least 15 hours per week and working in their current role for at least 6 months. Demographic questionnaires were administered to obtain participant demographics. Virtual semi-structured interviews were used to gather rich descriptive data, allowing for in-depth understanding of participant perspectives.

Results: The study yielded novel evidence of LTC HCAs' perceptions of structural empowerment and data analysis is in progress. Promising practices of high performing LTC facilities were uncovered while room for improvement in these and other organizations was highlighted. Early findings indicate that feeling appreciated by residents and autonomy in decision-making insulated HCAs from disempowering aspects of their work. Participants highlighted the importance of teamwork in creating efficiency, improving quality of resident care, preventing injuries, and reducing job stress. Short-staffing and use of temporary staff was a cause of poorer resident care and increased workload. Reflections on leadership tended to be positive, particularly in organizations that supported HCAs' pursuit of nursing studies. The study supported previous findings that minorities disproportionately occupy HCA positions.

Conclusion: This study has the potential to inform future interventions and research aimed at improving resident quality of care in ways that optimize HCA empowerment. It also has the potential to be used to inform modification of the CWEQ-II (a validated structural empowerment measurement tool) for LTC HCA populations.

Closing the gap between program implementation and system design: Understanding differences in how implementers and system stakeholders approach the development of Ontario Health Teams

Presented by: Gayathri Embuldeniya

All Authors*:* *Gayathri Embuldeniya1, Paul Wankah Nji1, Walter P. Wodchis1, 2*
Author Affiliations: *1Institute of Health Policy Management & Evaluation, University of Toronto, 2Institute for Better Health, Trillium Health Partners*

Background and Objectives: Ontario Health Teams (OHTs) were introduced in 2019 with the aim of reforming healthcare delivery. Ontario's Ministry of Health (MOH) hoped that they would encourage providers to work together across sectors to deliver coordinated, clinically and fiscally accountable care. With implementation underway, we focused on understanding aspects of the system and policy context that OHT stakeholders perceived as frustrating implementation, while simultaneously understanding how system stakeholders responded to frustrations and where their own concerns lay.

Approach: We conducted 18 one-hour long semi-structured interviews with system and OHT participants from November 2022 to February 2023. Six interviews were conducted with OHT participants, 10 with system stakeholders and two with participants who crossed OHT-system boundaries. OHT participants were leaders within their OHTs, while system participants crossed a range of levels and areas of expertise at both the MOH and Ontario Health, the Crown agency responsible for the administration of Ontario's healthcare system. Interviews were conducted by three researchers, then transcribed and coded. The views of system and OHT participants on the same theme were iteratively compared and contrasted.

Results: OHT and system participants differed in their understanding of system-related gaps and responsibilities in four areas: 1) setting direction and the levers to enact change, 2) accounting for local priorities while encouraging standardization, 3) the role of and responsibility for funding, and 4) system-related roles and relationships. We found, for instance, that while OHT participants felt that they lacked direction and the levers to enact change, system participants emphasized the need to develop an understanding of how to leverage existing supports and build capacity. Similarly, while OHTs railed against expectations that did not make local sense, system stakeholders focused on the value of standardization. And while OHTs focused on a dearth of funding, system stakeholders emphasized the need for OHTs to generate value from within.

Conclusion: Both OHT and system participants shared a lack of understanding of the other. OHT participants found it difficult to understand the transformation under way from a health system perspective, while system participants undervalued the importance of communication and translation. Recommendations developed therefore focused on bridging this gap.

Identifying hospitalization episodes of care among people with HIV using a pan-Canadian linkage of hospital records

Presented by: Scott Emerson

All Authors*: Michael Budu1, Paul Sereda1, Jason Trigg1, Taylor McLinden2, Huimin Lu1, Rolando Barrios1, Amanda Yonkman1, Robert Hogg1, 2, Scott Emerson1*
Author Affiliations: *1BC Centre for Excellence in HIV/AIDS, 2Simon Fraser University*

Background and Objectives: Hospitalizations are a major component of healthcare utilization, particularly among persons with chronic conditions, including people with HIV (PWH). In the pan-Canadian Discharge Abstract Database (DAD), interhospital transfers appear as separate records - yet misclassifying transfers as independent hospitalizations can bias hospital performance metrics (e.g., count of readmissions). We examined approaches of mitigating this issue by combining sequential, related records into hospitalization episodes of care (HEoCs) among PWH within a unique pan-Canadian linkage of hospitalization records.

Approach: Hospitalization records (2006 to 2020) from all provinces and territories were sourced for people (aged >19 years) ever hospitalized with an HIV-related diagnostic code in that period, from the Canadian Healthcare Use Study (CHESS) - a population-based data linkage of hospitalization records. Guided by published approaches, we constructed 8 HEoC definitions that varied by: a) time gap between records (same day; ≤1 day), and b) transfer indication (none; one-way populated hospital transfer fields; one-way, or two-way matching of hospital transfer identifiers). Comparisons were informed by the % of multi-record HEoCs (episodes containing multiple hospitalization records) generated, and feasibility given data quality.

Results: We analyzed 129,684 hospitalization records from 29,394 PWH (72.3% male; 50.6% of records were submitted by hospitals in Ontario or British Columbia). Across the definitions, the proportion of multi-record HEoCs varied from 2.71% to 5.53%. Definitions yielding the highest % of multi-record HEoCs were the least stringent, requiring no transfer indication but combining records occurring ≤1 day apart. Definitions yielding the lowest % of multi-record HEoCs were the most stringent, requiring two-way agreement of hospital identifiers. When transfers did occur, the most common pattern is a single interhospital transfer within an HEoC (approximately 80% of multi-record HEoCs). A pragmatic approach to defining HEoCs - requiring one-way population of hospital transfer identifiers and a ≤1 day gap to combine related hospitalizations - may be reasonable for general use.

Conclusion: This work leveraged a unique pan-Canadian linkage of hospitalizations among PWH. Definitions performed similarly within each Canadian region, supporting identification of HEoCs for pan-Canadian analyses of healthcare use among PWH with the goal of yielding more informative ways to estimate certain hospitalization-related metrics for PWH.

Constructing A Care Cascade Framework For Syphilis: A Strategy To Identify Gaps In Care

Presented by: Amanda Everton

All Authors: *Amanda Everton1, Souradet Shaw1*
Author Affiliations: *1Department of Community Health Sciences, University of Manitoba*

Background and Objectives: Syphilis infections have resurged in Canada where, from 2018 to 2020, cases of infectious syphilis and congenital syphilis increased by 109% and 599% respectively. A 2020 report recognized that knowledge is missing on the 'cascade of care' for syphilis in Canada. A 'cascade of care' is a tool used to identify gaps in care pathways and to inform and monitor interventions. As no standardized syphilis care cascade currently exists, this study aims to develop one.

Approach: Using best practice guidelines, we will develop an indicator-based framework for syphilis management that identifies (1) care pathways at key stages of prevention, diagnosis, treatment, and follow-up; (2) outcome indicators (clinical targets) to measure care effectiveness; and (3) process indicators to identify gaps and barriers to improving care. The framework will be developed by an expert group of researchers, service providers, and decision makers, using focus groups and a modified nominal group technique to reach consensus. Indicators will be broadly defined for use in large-scale national evaluations, and then further adapted for use at a local level, specific for Manitoba.

Results: This study will produce a standardized cascade framework tool based on established best care practices, that will identify (1) primary through tertiary care activities shown to effectively manage syphilis, and at each care stage; (2) process indicators to assess adherence (e.g., whether providers can implement best practices as planned); and (3) key fields of a data surveillance system needed to monitor program effectiveness. Framework application will generate comprehensive knowledge about changes in structures and processes needed to improve syphilis management. This study will produce (1) a syphilis cascade framework to be assessed for future national implementation (2) guidance on how to adapt this framework for use locally or for various sub-populations; and (3) a framework adapted for use specifically in Manitoba.

Conclusion: A standardised syphilis care cascade framework will provide a valuable tool for health officials to effectively address the ongoing syphilis epidemic. Including researchers, service providers, and decision makers in the development process facilitates effective design, and also facilitates the next steps of implementation and routine utilization of this framework.

Exploring the construct of just culture in patient and resident physician populations: A patient-oriented study

Presented by: Duaa Fatima

All Authors*:* *Duaa Fatima1, Aliya Kassam 1*
Author Affiliations: *1Community Health Sciences, Cumming School of Medicine, University of Calgary*

Background and Objectives: Shifting the blame from healthcare providers in an adverse event to understanding the actual systemic root cause of an adverse event is called 'Just Culture.' The Just Culture Assessment Tool (JCAT) measures and directs resources toward improving healthcare thereby ensuring patient safety. This study explores the construct of Just Culture in patient and resident physician populations through an adaptation of the JCAT while considering how intersectional identities could implicate equity within the health care system.

Approach: This qualitative patient-oriented study will engage 2-4 patient partners with lived experiences of safety issues and/or event reporting within healthcare to co-produce research outputs under the guidance of the CIHR Strategy for Patient-Oriented Research (SPOR) framework. Semi-structured focus groups of 4-5 participants will be conducted independently with patients and resident physician populations. Domains of inquiry for focus groups will include demographics, barriers and facilitators to Just Culture, and the interaction between hierarchy/power, privilege, equity, and patient safety. Focus group data will be audio-recorded and transcribed verbatim for thematic analysis to inform the revision of the JCAT.

Results: There is a large gap in the literature on incorporating Just Culture within resident training programs and exploring the attitudes and perceptions toward Just Culture among patient and resident physician populations. Additionally, studies have reported racial, ethnic, and socioeconomic disparities in rates of adverse event reports, highlighting the need to investigate the construct of Just Culture in various healthcare settings across the intersection of key stakeholders in residency education and healthcare through an equity-diversity lens. Study findings will address gaps in the literature on Just Culture as perceived by a learner population of medical trainees and end-users of the healthcare system. The study will contribute to the adaption of the JCAT for use among patient and resident physician populations with consideration to intersectional identities.

Conclusion: Findings will inform curriculum and policy development around safe learning environments within resident training programs and policy implications for the healthcare system. Findings will be disseminated through patient-oriented activities. An adapted JCAT could be used as a systems level tool for health equity measurement in both upstream and downstream initiatives.

Service Variation among Inpatients with patterns of Trauma and Substance Use in Ontario, Canada

Presented by: Danielle Fearon

All Authors: *Danielle Fearon1, Chris Perlman1, Scott Leatherdale1, John Hirdes1*
Author Affiliations: *1University of Waterloo*

Background and Objectives: Among individuals who have experienced traumatic life events, comorbidities such as substance use commonly co-occur. Differences in types and patterns of both trauma and substance use may contribute to greater health service use. Using Latent Class Analysis, 8 subgroups identifying patterns of individuals with trauma and substance use in inpatient mental health were determined. The purpose of this study was to examine variation in services complexity among the 8 latent classifications.

Approach: Using assessment data from the Ontario Mental Health Reporting System, individuals with prior or ongoing trauma were identified (N=7,871). Included patients had an inpatient admission between January 1, 2015 to December 31, 2019, with no psychiatric admissions within the last two years. A service complexity variable was derived based on contact of at least 15 minutes per day, up to 7 days with health services (e.g., psychiatrist, social worker, nursing medical interventions) and length of stay. Service complexity was grouped by total score into low, medium, and high complexity. Regression modelling was used to assess latent classes and service complexity.

Results: High service complexity (i.e., the upper quintile of formal care service use) was observed in 18.1% of individuals with trauma. Baseline bivariate analyses suggested a significant association between latent classes and service complexity. Models identified that certain classes, such as patients with widespread trauma and indicators of alcohol and cannabis addiction were 2.1 times (95% CI: 1.68-2.50) more likely to have high service complexity). Patients with safety and relationship-related traumas with alcohol and cannabis use, were less likely to have high service complexity compared to those with interpersonal issues, without substance use. Additional characteristics such as higher education, and being employed were also associated with higher service use.

Conclusion: Services need to be sensitive to the distinct nature of trauma and patient characteristics to improve care. Therapeutic interventions are important when an individual is using substances casually to prevent greater harm from substance use. Future research may consider resource measurement to validate differences observed in service complexity.

The mediating effect of quality on the relationship between attachment to Interprofessional Primary Care teams and health service use in older adults

Presented by: Pamela Fernainy

All Authors: *Janusz Kaczorowski1, Cristina Longo1, Marie-Eve Poitras2, Claire Godard-Sebillotte3, Pamela Fernainy1, 4, Mylaine Breton2, Yves Couturier2, Geraldine Layani1, 4, Nadia Sourial1, 4, Marie-Thérèse Lussier1, Maria Alejandra Rodriguez1, 4, Anaïs Lac*

Author Affiliations: *1University of Montreal, 2University of Sherbrooke, 3University of McGill, 4Centre de recherche CHUM, 5Université du Québec en Abitibi- Témiscamingue*

Background and Objectives: Interprofessional primary care teams, comprised of family physicians, and other health professionals, are considered an effective strategy to counteract the expected increased use of health services associated with population aging. While the literature has studied the separate effect of interprofessional teams on quality of care and health service use, little is known about their interrelations. This study aims to explore the effect of interprofessional teams on health service use as mediated by quality of care.

Approach: This will be a retrospective longitudinal cohort study, using Quebec's administrative health data linked to results from the Canadian Community Health Survey (CCHS). The target population will be community-dwelling adults (65+) who participated in the CCHS (n≈3000). Causal mediation, utilizing Vanderweele's four-way decomposition, will be used to decompose the effect of interprofessional teams (exposure) on the outcome health service utilization (emergency department use, and avoidable hospitalizations), that is mediated by quality of care (access, continuity, and coordination).

Results: A regression-based approach will be employed to decompose the effect of interprofessional teams on health service use into four components, the effect due to: mediation, interaction, both mediation and interaction, and neither mediation nor interaction. The results will be reported as incidence rate ratios with 95% confidence intervals. Further, these four components and the total effect will be used to determine the proportion of the effect attributable to mediation and to interaction, and the proportion that could be eliminated by intervening on quality of care. These estimates will provide insight into the role of different pathways of interprofessional teams, quality of care, and health services, whether at the level of the exposure, the mediator, or both.

Conclusion: Results of this analysis will help to better understand how interprofessional teams affect the quality of care and health service use. Based on these quantitative results, consequent quantitative and qualitative studies will explore ways to improve the effectiveness of teams for older adults through policy-directed changes.

Reducing Medication Cost Burden for Underinsured Individuals in Alberta: A Public Policy Analysis

Presented by: Jane Fletcher

All Authors: *Stephen Samis1, Olivia Fulton1, Jane Fletcher1, Brenlea Farkas1, Reed Beall1, Amity Quinn1, Braden Manns1, Dave Campbell1*
Author Affiliations: *1University of Calgary, Cumming School of Medicine*

Background and Objectives: Many Albertans face substantial out-of-pocket expenses for medically necessary prescription drugs. This especially impacts lower-income adults with employer benefits lacking insurance and who do not qualify for government benefits. For this group, choosing between filling prescriptions and meeting basic needs is a common dilemma, impacting medication adherence. Our study aims to employ a traditional public policy analysis framework, identifying and systematically evaluating optimal policy options to improve public coverage for the underinsured population in Alberta.

Approach: We assembled a team of policy analysts, experts, and patient partners to follow the six steps of a traditional public policy analysis: problem identification; determining evaluation criteria; identifying and assessing policy options; selecting the preferred policy option; and designing implementation and monitoring. An environmental scan of existing public drug insurance schemes across provinces and territories was completed to identify the top-3 policy options. The analysts then independently scored each according to the six decision criteria recommended by the National Collaborating Centre for Healthy Public Policy based on available evidence, namely: effectiveness, unintended effects, equity, cost, feasibility, and acceptability.

Results: The results of scoring the top-3 policy options (currently in progress) according to a rubric aligned with the six decision criteria will be reported. Consistent with traditional public policy analysis, one policy option will be the status quo, namely, monthly premiums with subsidies based on income and household size paired with 30% co-insurance and a $25 cap per medication. We anticipate the other two options will include a co-insurance scheme with no monthly premiums, or a means-tested deductible-based insurance scheme. Analysis will take place in February 2024 with results to report in March 2024. The top scoring policy option will be identified. Implementation and monitoring recommendations will be crafted for how to maximize the recommended option's strengths while still minimizing its anticipated weaknesses.

Conclusion: The results of this policy analysis are expected to inform provincial decision-makers and public insurance providers of potential options to improve drug coverage for working-age Albertans who currently have inadequate coverage.

Identifying Gaps in Breastfeeding Education and Support: Perspectives and Experiences of Healthcare Providers and Lactating Parents

Presented by: Samantha Fowler

All Authors: *Dr. Alana Newman1, Mary Kate Williams2, Dr. Katherine Herrington1, Lauren McLaughlin1, 3, Sarah Bridges1, 3, Dr. Grace Dao1, 4, Samantha Fowler1, 3, Sarah Ainsworth2, Millie O'Brien2, Adrienne Gulliver1, 3*
Author Affiliations: *1Horizon Health Network, 2Patient Partner - Breastfeeding Mother, 3Maritime SPOR SUPPORT Unit, 4Dalhousie Medicine New Brunswick*

Background and Objectives: The benefits of breastfeeding for lactating parents and babies are well-established; however, rates of breastfeeding initiation, exclusive breastfeeding, and breastfeeding at 12 months are low in Canada, including New Brunswick. Several barriers contribute to this, including a lack of support from healthcare providers (HCPs) which may be a result of insufficient breastfeeding-related education during HCP training. We aimed to identify gaps in breastfeeding education and care from the perspective of lactating parents and HCPs.

Approach: We surveyed breastfeeding parents (≥ 19 years of age, able to understand English) across Horizon Health Network who have breastfed or attempted to breastfeed a baby during the last year and sought support for breastfeeding-related challenges (N = 145). We asked them to indicate what conditions they sought support for, what type of HCP they consulted, and to rate the HCP's knowledge, comfort, and whether they felt their concerns were taken seriously. Furthermore, we surveyed HCPs (N = 99) about their breastfeeding education and knowledge as well as comfort managing common breastfeeding challenges. We descriptively compared parent and HCP responses.

Results: Parents rated resources such as the Mother Baby Clinic and lactation consultants consistently high in knowledge, comfort, and taking concerns seriously. Conversely, ratings of primary care providers were highly varied across various conditions. Over a quarter of HCPs disagreed that their education equipped them to provide adequate breastfeeding support and over half reported seeking additional resources. Nevertheless, for most common conditions, the majority of HCPs agreed or strongly agreed their knowledge and comfort was adequate. Some discrepancies were noted between cohorts: for example, most family medicine physicians reported discussing breastfeeding prenatally (86%) and postpartum (98%), whereas only 35% of parents reported engaging in these conversations with their primary care provider prenatally and 64% postpartum. Further similarities and differences will be reported.

Conclusion: The results of these analyses provide a nuanced picture of parent experiences seeking care for breastfeeding-related challenges while simultaneously considering the perspectives and needs of HCPs. The results of this study will inform potential areas for improvement in medical training and health services to address gaps in breastfeeding care.

Association between winter weather and the risk of a fall requiring surgery among seniors in Ontario, Canada

Presented by: Stephen Fung

All Authors: *Sarah Erdman1, Stephen Fung2, Peter Tanuseputro2, 3, 4, 5, Claire Kendall2, 6*
Author Affiliations: *1School of Epidemiology and Public Health, University of Ottawa, Ottawa, Ontario, Canada, 2Bruyère Research Institute, Ottawa, Ontario, Canada, 3Division of Palliative Care, Department of Medicine, University of Ottawa, Ottawa, Ontario, Canada, 4Ottawa Hospital Research Institute, Ottawa, Ontario, Canada, 5ICES uOttawa, Ottawa, Ontario, Canada, 6Faculty of Medicine, University of Ottawa, Ottawa, Ontario, Canada*

Background and Objectives: Weather-associated falls and fall-related injuries have been described in the general population and investigated among the elderly, however, the burden of falls and injuries among seniors in Ontario, Canada attributable to weather has not been previously described. This retrospective study describes the health profiles of seniors in Ontario, Canada who fall, the burden of falls associated with winter, and weather indices most associated with falls requiring surgery.

Approach: We analyzed linked population-based health administrative data in Ontario, Canada to identify older adults aged over 65 years who experienced fall-related clinical encounters (emergency department visits and/or hospitalizations), and fall-related surgeries, between April 1, 2010 and March 31, 2015. We described the health profiles of seniors who fall including demographics, diagnoses count, medication count, and use of long-term care services. Environment Canada weather data were extracted by individual residential postal codes on the day of the fall-related clinical encounter. We used multivariable logistic regression to estimate the effect of weather on the risk of a fall requiring surgery.

Results: We identified 500,307 fall events occurring in 326,220 individuals. Less than 10% of fall-related clinical encounters resulted in surgeries, and 2% of fall-related clinical encounters resulted in death before hospital discharge. Overall, the health profiles of seniors falling in winter months were not clinically distinct from seniors falling during the rest of the year. Without adjusting for individual risk of fall-related injury, falling on days with high snowfall was associated with 31% increased odds of requiring surgery (95% CI 1.07-1.62), while falling on days with the highest slipperiness score was associated with 22% increased odds of requiring surgery (95% CI 1.13-1.33). However, 31% of all falls occurred at home, and 55% of individuals fell on days where there was no precipitation.

Conclusion: Seniors who fall in the winter were comparable with seniors who fall during other seasons. Although snowfall and slipperiness scores were incrementally associated with the risk of a fall requiring surgery, our results suggested that weather-related interventions would not address the majority of falls in seniors.

Optimizing Managers’ Involvement in Quality Improvement Projects: Lessons Learned from the COMPAS+ Project

Presented by: Justin Gagnon

All Authors: *Guylaine Giasson1, Brigitte Vachon2, Justin Gagnon1, Isabelle Gaboury1, Mylaine Breton1*
Author Affiliations: *1Faculty of Medicine and Health Sciences, Université de Sherbrooke, 2School of Rehabilitation, Faculty of Medicine, Université de Montréal and Centre de recherche du CIUSSS de l’Est-de-l’Île-de-Montréal*

Background and Objectives: Managerial involvement is considered integral to the success of healthcare quality improvement (QI) projects. However, research aiming to optimize their roles remains scant. COMPAS+, a large-scale chronic disease management QI initiative in Quebec, presents a suitable context for examining these roles. The objectives of this study were to understand the roles regional and local managers played in supporting and managing the COMPAS+ project and identify strategies for optimizing their involvement and enhancing their contributions.

Approach: This study is embedded within a larger mixed-methods convergent design that aimed to measure COMPAS+ project improvement outcomes and explore its barriers and facilitators. The research reported here consists of a qualitative case study of four regional health networks that completed the COMPAS+ project. Data comprised 23 semi-structured interviews with key actors involved in chronic disease care and who participated in COMPAS+. Deductive and inductive thematic analysis of the interviews was performed, employing a conceptual framework that classifies managerial roles into four categories: initiator, supporter, consultant, and collaborator.

Results: Our study identified regional variations in QI project management across the four regions. In three regions (A, B, C), during the preparatory phase, senior regional managers played an initiator role, having provided strategic direction, allocated resources, and established implementation committees comprising local managers and project coordinators. The fourth (D) adopted a decentralized approach, emphasizing institutional-level coordination and collaborative management through local teams and project coordinators. While regions B and D focused on tailoring interventions to their unique contexts, addressing role definitions, care pathways, and professional development, region A aimed to implement standardized tools and care trajectories throughout the region. Region C’s strategy, on the other hand, involved creating a specialized centre of expertise instead of improving organizational processes.

Conclusion: Our findings suggest that optimal managerial involvement does not demand their direct implication as collaborators in every project stage, especially when communication between project coordinators and managerial levels is strong. This research provides insight into aspects of project management that should be effectively addressed to foster successful implementation.

Insights into primary care administrative workload: An analysis of EMR data

Presented by: François Gallant

All Authors*: Mathew Grandy1, Sarah Sabri1, François Gallant1, 2, Ruth Lavergne1, Catherine Moravac1*
Author Affiliations: *1Dalhousie University, 2Vitalité Health Network*

Background and Objectives: Administrative workload remains a burden for primary care providers in Canada. Prescriptions, referrals, and laboratory tests each require administrative coordination over and above patient visits, and may be contributing to primary care provider workload. Our objective was to describe trends in prescriptions, referrals, and laboratory tests per encounters using electronic medical record (EMR) data in Nova Scotia to provide insights for broader investigations across Canada.

Approach: We used de-identified Nova Scotian primary care EMR data available from the Maritime Family Practice Research Network (MaRNet-FP) to describe trends in prescriptions, referrals, and laboratory tests per encounters from 2007 to 2022. We limited our analysis to clinicians with at least 500 patient encounters per year (n=20). We report means and associated standard deviations, and described trends over time.

Results: On average, clinicians with 500 or more patient contacts had an average of 2.7 (±0.9SD) encounters per patient since 2007. On average, each encounter resulted in 1.7 (±0.7) prescriptions, 1.1 (±0.5) referrals, and 6.6 (±2.8) laboratory tests. Trends in prescriptions, referrals, and laboratory tests per encounter seem consistent over time, though fell in the context of the COVID-19 pandemic. However, since 2020, encounters per patients increased, perhaps compensating for wait times for referrals. Taken together, the number of prescriptions, referrals, and laboratory tests per encounter point to a substantial volume of administrative work over and above time with patients.

Conclusion: This province-specific investigation supports the use of EMR data to describe trends in administrative workload and informs the need for further analysis within national EMR data available through the Canadian Primary Care Sentinel Surveillance Network (CPCSSN) to understand pan-Canadian trends.

Transforming Healthcare by Prioritizing All Clinical Trial Evidence: Evaluating the Aging, Community and Health Research Unit's Community Partnership Program (ACHRU-CPP)

Presented by: Rebecca Ganann

All Authors*: Diana Sherifali1, Maureen Markle-Reid1, Melissa Northwood1, Rebecca Ganann1, Kathryn Fisher1, Soo Chan Carusone1*
Author Affiliations: *1McMaster University*

Background and Objectives: Best practices in pragmatic clinical trials recommend examining implementation to help understand unexpected findings and how context influences outcomes. This involves Integration of qualitative and quantitative trial results, often thought of as seeking consistency, yet divergent findings may occur. This case example illustrates the dilemmas mixed findings present, how discrepant qualitative and quantitative trial findings were reconciled, and the rich insights gained through examining implementation and effectiveness with balanced consideration of both forms of evidence.

Approach: This multi-jurisdictional (3 provinces, 6 sites) type II hybrid randomized controlled trial (RCT) had equal emphasis on evaluating effectiveness and implementation. The RCT ran from 2019 to 2022 and tested a new self-management intervention delivered by an interprofessional team to community-dwelling older adults (≥ 65) with diabetes and 1+ other chronic conditions. The intervention was co-designed with patients and providers, theory-informed, and proven feasible and effective in prior studies. We created a novel conceptual model that integrated two well-known frameworks - Consolidated Framework for Implementation Research (CFIR) and Quintuple Aim - and then applied this model to evaluate the available trial data.

Results: Sample size (n=294) exceeded the target, yet quantitative findings failed to show a treatment effect across all 9 patient outcomes. In contrast, qualitative findings provided strong evidence favouring the intervention on patient experience, provider experience, population health, and health equity. CFIR implementation evidence supported this, indicating the intervention was adoptable, implementable, and sustainable, if certain conditions were met (e.g., targeting patients in higher need of the intervention's resources, increased tailoring, engaging senior leaders and primary care). Strong evidence for the intervention also comes from one study site's plan to integrate the intervention into existing practice. Convergence was achieved for two of five Quintuple outcomes - provider experience and cost - where interprofessional collaboration was the main benefit cited and costs potentially-exceeding benefits was the primary concern raised.

Conclusion: Key reasons this RCT's evidence diverged include challenges in capturing quantitative measures of patient-centered outcomes and responding to contextual changes during the trial (e.g., pandemic, policy). Our framework helped integrate qualitative and quantitative findings, but work remains to overcome the prioritization of quantitative findings in evidence hierarchies and healthcare decision-making.

Trends in the Cost and Utilization of Publicly Dispensed Respiratory Inhalers in Ontario, Canada: A Repeated Cross-Sectional Study

Presented by: Ria Garg

All Authors: *Tara Gomes1, 2, 3, 4, 5, Tianru Wang3, Tony Antoniou1, 3, 6, 7, Ria Garg1, 2, 3, Mina Tadrous2, 3, 8*
Author Affiliations: *1Li Ka Shing Knowledge Institute, Unity Health, Toronto, Ontario, Canada, 2Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, Ontario, Canada, 3ICES, Toronto, Ontario, Canada, 4MAP Centre for Urban Health Solutions, St. Michael's Hospital, Toronto, Ontario, Canada, 5Institute for Health Policy, Management, and Evaluation, University of Toronto, Toronto, Ontario, Canada, 6Department of Family and Community Medicine, Unity Health, Toronto, Ontario, Canada, 7Department of Family and Community Medicine, University of Toronto, Toronto, Ontario, Canada, 8Women's College Research Institute; 76 Grenville St., Toronto, Ontario, M5S 1B2, Canada*

Background and Objectives: Ongoing renewal of patents for brand-name respiratory inhalers has substantially inflated the cost of respiratory disease treatment, imposing a financial strain on both public and private payers. While new brand-name combination therapy inhalers and generic alternatives for Advair® and Flovent® were recently listed on public formularies, the cost implications remain unknown. Therefore, our objectives were to examine trends in the utilization and cost of respiratory inhalers reimbursed by the public payer in Ontario, Canada.

Approach: We conducted a repeated cross-sectional study among all individuals dispensed a respiratory inhaler through the public drug benefits program between January 1, 2003, to March 31, 2023. The following outcomes were reported overall per calendar quarter and stratified by drug class (e.g., inhaled corticosteroid and long-acting beta-agonist [ICS/LABA], long-acting muscarinic agents [LAMA]/LABA): 1) public payer spending on respiratory inhalers; 2) number of beneficiaries dispensed at least one respiratory inhaler; and 3) per-capita public payer spending. Costs were inflation-adjusted to 2023 Canadian dollars. Lastly, we used joinpoint regression analysis to characterize changes in per-capita public payer spending.

Results: Over the study period inhaler costs increased by 159.6% ($26,206,322 to $68,054,816), while the number of beneficiaries increased by 92.5% (155,893 to 300,074). Despite rising per-capita costs between 2003 to 2014, in Q2, 2015 (formulary listing of LAMA/LABA inhalers) the trend declined for the first time (-1.38% and -4.07% per quarter between Q2, 2015 - Q2, 2017 and Q3, 2017 - Q2, 2018, respectively). Between Q3, 2018 to Q2, 2019 the trend increased by 4.38% per quarter. However, following Q3, 2019 (formulary listing of ICS/LAMA/LABA) per-capita spending plateaued despite subsequent listing of generic alternatives for Advair® and Flovent®. When stratified by inhaler drug class, ICS/LABA ($33,844,484 in Q1, 2023) was the primary driver of overall costs, while per-capita cost was greatest for ICS/LAMA/LABA ($392 in Q1, 2023).

Conclusion: While formulary listing of combination therapy respiratory inhalers led to a reduction in public payer spending, generic inhaler listing minimally impacted per-capita spending, which may be due to the limited availability of generic alternatives. Regulatory reform should be considered to prevent patent prolongation, and further support introduction of generic inhalers.

When the pathway is as important as the destination: implementing Ideal Care Pathways for brain injuries addressing mental health needs

Presented by: Judith Gargaro

All Authors: *Jennifer Duley1, Denis Boileau2, Connie Coburn3, Mark Bayley4, Judith Gargaro4, Matheus Wiest4, Swati Mehta5*
Author Affiliations: *1Hamilton Health Sciences, 2Vista Centre Brain Injury Services, 3Home and Community Care Support Services Champlain, 4University Health Network, 5Parkwood Institute Research*

Background and Objectives: There is a high incidence of mental illnesses after traumatic brain injury (TBI - 77%) and spinal cord injuries (SCI - 27%). The Neurotrauma Care Pathways, in partnership with >200 provincial key partners (people with lived experience, caregivers, clinicians, service providers, etc.), developed Care Pathways for TBI and SCI that include mental health supports. Objective: to discuss the Pathways, existing care gaps, and implementation activities, highlighting two projects focusing on new regional mental health programs.

Approach: Part 1: discuss the Neurotrauma Care Pathways development process, focusing on co-designing with people with lived experience, integrating clinical practice guidelines, individualizing the Pathways to address equity, and developing quality indicators. Part 2: focus on two key implementation projects driving: 1) mental health education for persons with lived experience and their families after SCI rehabilitation, and 2) post-traumatic stress disorder (PTSD) training for TBI rehabilitation care providers. We will discuss project development, implementation and evaluation strategies, outcomes and sustainability plans. There is a focus on scale-up and spread of these innovations.

Results: The Care Pathways address the journey from the time of injury to community living. They are grounded in living clinical practice guidelines and equity elements such as local care and social determinants of health. Key Implementation Project 1) is an evolution of a research program that expanded from London, ON, to Hamilton, ON and has received strong value and satisfaction ratings. Sustainability was achieved by embedding the program into organizational best practices and care maps. Project 2) is implemented in Ottawa, ON; participants rated the program as filling a much-needed gap in education to identify and treat PTSD TBIs. Sustainability was achieved by a low-cost production strategy and by embedding PTSD training into the Ottawa Hospital's best practices. Publicly available implementation guides were produced.

Conclusion: Come learn how to take advantage of the TBI and SCI Care Pathways to reduce care inequities in Ontario. Together, we can discuss how you can be the next champion to continue to forge the implementation of the Pathways and how to scale these mental health programs in your organization.

Perspectives of family physicians on the replacement of ICD-9 used for billing claims in Canada - a qualitative study

Presented by: Stephanie Garies

All Authors: *James A. Dickinson1, Danielle Southern1, Michelle Smekal1, Cathy Eastwood1, Stephanie Garies1, Neil Drummond1, 2, Tyler Williamson1, Keith Denny3, Kerry McBrien1, Olawunmi Olagundoye2, Dewdundee Himasara Pathiraja1, Alexander Singer4, Huib Ten Napel5, Ma*

Author Affiliations: *1University of Calgary, 2University of Alberta, 3Canadian Institute for Health Information, 4University of Manitoba, 5Radboud University Medical Centre, 6University of Toronto*

Background and Objectives: Canada implemented the International Classification of Diseases version 9 (ICD-9) in 1979, which is still used by outpatient physicians to submit diagnostic codes for billing claims. These coded administrative data are subsequently used for research, surveillance, and policy decisions. However, ICD-9 is outdated and does not reflect the broad activities and patient complexities managed in primary care settings today. Our study explored family physician perspectives on the potential adoption of a newer classification system.

Approach: This was a qualitative descriptive study. Practising family physicians were recruited from across Canada to participate in 60-minute semi-structured virtual focus groups in late 2023. A trained qualitative facilitator guided the physicians through several discussion topics related to the current use and challenges of ICD-9, as well as the facilitators and barriers to implementing a new diagnostic classification system for physician billing in Canada. A hybrid deductive-inductive thematic analysis is currently underway.

Results: 29 family physicians from 5 provinces participated in five focus groups. Overall, participants described a variety of challenges with using ICD-9 in primary care, such as a lack of codes that accurately describe patient visits and difficulties finding appropriate codes in their electronic medical record (EMR) system. Preliminary themes emerging from discussions on the barriers of implementing a new classification system include cost (e.g. in relation to physicians, EMR vendors, governments), time (e.g. additional training, time learning a new coding system), and provincial/territorial governments (e.g. fitting with policy priorities, making a decision to change billing requirements). Final results will be presented at the conference in May 2024, including facilitators and preferences in a new system.

Conclusion: This study will provide an in-depth analysis of family physician perspectives on replacing ICD-9 in Canada. These findings will build evidence to guide recommendations for policymakers about future decisions to replace ICD-9 and strategies to ensure a successful transition.

Competition in generic drug markets: international progress and room for improvement, 2010-2021

Presented by: Étienne Gaudette

All Authors: *Mina Tadrous1, Étienne Gaudette1, 2, Kevin R. Pothier2, Shirin Rizzardo2*
Author Affiliations: *1University of Toronto, 2Patented Medicine Prices Review Board*

Background and Objectives: Studies have shown generic drugs to be resilient to drug shortages when multiple competing generic offerings can be used interchangeably for the drugs in shortage. This research aimed to compare the generic drug markets of a group of countries with similar pharmaceutical environments and study how competition has evolved in recent years.

Approach: The study used oral solid drug sales data from IQVIA's MIDAS database and population data from the OECD for the period 2010-2021. We investigated trends in the number of companies selling generics, the distribution of medicines sold by number of available generics, and the proportion of off-patent markets dominated by a single manufacturer. We compared the generic markets of 13 high-income countries: Australia, Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Norway, Spain, Sweden, the United Kingdom, and the United States.

Results: Between 2010 and 2021, a growth was observed in the number of generic companies selling 25 or more generic products in 10 of 13 countries. Although levels were generally correlated with population size, there were exceptions. For example, Sweden had more generic manufacturers than France in 2021, despite having less than a sixth of its population. While the share of drugs with at least 2 generic options increased in all countries except Japan and Canada, the share remained below 50% in 10 of 13 countries in 2021, meaning that over half of products sold did not feature competition for generic products. As a result, over 70% of off-patent products were dominated by a single company in all countries except the United States (65.1%).

Conclusion: Although we found increases in the number of competing firms and drugs with at least two generics available in most countries during the study period, significant cross-country differences remained and most off-patent drugs were dominated by a single company in all countries in 2021, suggesting considerable room for improvement.

Cost-effectiveness of the top 100 drugs by public spending in Canada, 2015-2021: a repeated cross-sectional study

Presented by: Étienne Gaudette

All Authors: *Étienne Gaudette1, 2, Kevin R. Pothier2, Mina Tadrous1, Shirin Rizzardo2, Yvonne Zhang2*
Author Affiliations: *1University of Toronto, 2Patented Medicine Prices Review Board*

Background and Objectives: Public payers must often balance pressure from the pharmaceutical industry and patient groups to fund drugs with unproven value with the impact of doing so on the sustainability of their plans. This research aimed to assess the prevalence of and spending for cost-effective drugs amongst those drugs with the highest public spending levels in Canada.

Approach: A repeated cross-sectional study approach was used to document the cost-effectiveness assessments by the Canadian Agency for Drugs and Technologies in Health (CADTH) for top-100 brand-name drugs by gross public plan spending in any year between 2015 and 2021 in Canada Institute for Health Information's National Prescription Drug Utilization Information System (NPDUIS) data. Gross public plan spending by cost-effectiveness category were also analyzed. The provincial public plans included in the analysis were those of Manitoba, Ontario, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland.

Results: From 2015 to 2021, 152 brand-name drugs occupied a top-100 rank and were included in the analysis. Of those, 117 had been assessed by CADTH. During the 7-year period, there was an increase of both top-100 drugs with cost-effective (from 18 to 24) and cost-ineffective (from 29 to 41) assessments, while drugs not assessed or with an unclear assessment declined (from 31 to 19 and from 22 to 16, respectively). As a share of spending on top-100 drugs with an assessment, spending on cost-effective drugs was mostly stable at 40%-46% from 2015 to 2021, while spending on cost-ineffective drugs increased from 30% to 45%.

Conclusion: A large and growing share of public drug spending has been allocated to cost-ineffective drugs in Canada. Dedicating large budgets to such treatments prevents spending with greater health impact elsewhere in the healthcare system and could restrain the capacity to pay for groundbreaking pharmaceutical innovation in the future.

Integrating Patient Partnership Initiatives with a Patient-Centric Approach to Enhance Emergency Department Services in Newfoundland and Labrador

Presented by: Aswathy Geetha Manukumar

All Authors*: Shabnam Asghari1, Oliver Hurley1, Dorothy Senior2, Christopher Patey3, Aswathy Geetha Manukumar1, Hensley Mariathas1*
Author Affiliations: *1Centre for Rural Health Studies - Memorial University of Newfoundland , 2NL SUPPORT Unit - Memorial University of Newfoundland, 3Discipline of Family Medicine - Memorial University of Newfoundland*

Background and Objectives: Patient partnership in healthcare research recognizes the importance of including the perspectives and experiences of those impacted directly by the study, i.e., the patients. Patient-centred care prioritizes patients' needs and preferences, treating them as individuals rather than just as diagnoses, focusing on communication, empathy, and shared decision-making.
With patient research partners (PRPs), this patient-oriented research (POR) will evaluate patient experience with emergency department (ED) care in Newfoundland and Labrador (NL) to improve patient-centred care.

Approach: This study is part of a larger project, “SurgeCon,” aimed to decrease ED wait times. We have implemented SurgeCon at four EDs in NL. Patients visiting these EDs are randomly selected to complete a telephone survey to collect feedback on ED services.
We conduct data analysis and interpretation with a team of PRPs. We have completed multinomial and ordinal regressions for quantitative questions and thematic analysis for qualitative questions. We are also co-developing strategies to improve patient-centred care in EDs. These strategies are discussed with the SurgeCon team, including NL Health Services decision-makers, and considered for implementation in the EDs.

Results: As a study centred around patients, we have monthly PRP meetings, allowing collaboration in planning, implementation, and evaluation. They have helped create a telephone survey, developed a checklist for training for patient-centred care, co-created dissemination materials, and co-presented at national and international conferences.
The data collection is in progress. Approximately 1475 patients participated in the survey. The interim analysis showed that urban patients are less likely to experience privacy than rural patients [multinomial regression, Odds Ratio (OR) 0.09, p-value <0.001] While male patients had a better experience with the ED staff showing concern for their comfort [ordinal regression, OR 1.42, p-value 0.01], the thematic analyses showed that female patients had a worse overall ED experience as they often felt their “concerns were not taken seriously.”

Conclusion: To promote patient-centred care in EDs, we need better insight into factors influencing patient satisfaction. Developing a patient-centric healthcare system and improving care quality requires co-building solutions with patients. Therefore, our study is one more step toward an inclusive healthcare system and encourages future health research in partnership with patients.

Analytical infrastructure to guide kidney transplantation policy: A Discrete Event Simulation approach to enhance kidney allocation strategies.

Presented by: Shahzad Ghanbarian

All Authors: *James Lan1, 2, Oliver Gunther3, Franz Fenninger1, Steven Shechter4, Mathew Kadatz1, 5, Shahzad Ghanbarian6, 7, Stirling Bryan6, 7, Paul Keown1, 2, Karen Sherwood1, 2, Mohammad Ashgarzadeh7, Louisa Edwards6, 7, Sonya Cressman8*
Author Affiliations: *1Department of Medicine, University of British Columbia, Vancouver, British Columbia, Canada, 2Department of Pathology and Laboratory Medicine, University of British Columbia, Vancouver, British Columbia, Canada, 3Günther Analytics, Vancouver, British Columbia, Canada, 4Sauder School of Business, University of British Columbia, Vancouver, British Columbia, Canada, 5Division of Nephrology, University of British Columbia, Vancouver, British Columbia, Canada, 6The Centre for Clinical Epidemiology and Evaluation, Vancouver Coastal Health Research Institute, University of British Columbia, Vancouver, British Columbia, Canada, 7The School of Public and Population Health, University of British Columbia, Vancouver, British Columbia, Canada, 8Department of Emergency Medicine, Faculty of Medicine, University of British Columbia, Vancouver, British Columbia, Canada*

Background and Objectives: Kidney transplant is the treatment of choice for patients with end-stage kidney disease, but these life-saving transplants may fail due to rejection. This is prompting development of advanced genomic technologies to reduce rejection risk. The use of epitope compatibility to guide deceased donor allocation is one promising approach. Our goal was to build analytical infrastructure to evaluate cost-effectiveness and equity implications of adding epitope compatibility to the current kidney allocation criteria in British Columbia (BC).

Approach: We developed a discrete event simulation model based on data relating to kidney transplant waitlist candidates, deceased donors, and transplantations in BC between 2008-2018. The model considers individual patient characteristics, comorbidities, and clinical parameters that change over time. Pre- and post-transplant modules comprise the model, simulating critical events, such as waitlist removal, transplantation, kidney rejection, graft failure, and death. Cox-proportional hazard models predict time-to-event outcomes. By comparing the current allocation system to an epitope-based system, the model estimates differential health outcome costs from a health system perspective, noting the distribution of costs and benefits across the clinical population.

Results: The model incorporates a dynamic cohort of patients with end-stage renal disease (ESRD) who join the waiting list and experience various clinical events. By encompassing the entire clinical pathway of patients and incorporating BC-specific data, we will deliver predictions of the benefits and costs associated with an epitope-based allocation strategy. These predictions estimate the economic impact, resource utilization, and health gains compared to the current standard of care, which prioritizes individuals with the longest waitlist time. The model estimates the average time to transplantation under different allocation scenarios and can identify groups of patients who would benefit the most and least. Additionally, the model can incorporate interactive decision nodes to assess different allocation criteria to shape more effective and equitable organ allocation policy in Canada.

Conclusion: We developed a novel simulation model of the kidney transplantation system in BC, facilitating assessment of benefits and costs associated with the adoption of Precision Medicine tools. Although the model was designed to evaluate epitope mismatch criteria, it has much broader utility in assessing other kidney transplant innovations.

The Role of Patients, Caregivers, and Communities in Learning Health Systems: a Narrative Review

Presented by: Rachel Giacomantonio

All Authors: *Mari Somerville1, 2, Rachel Giacomantonio3, 4, Teresa Finlay3, Joseph Wherton3, Susan Dunn5, Kristen Hemming5, Donna Rubenstein4, 5, Lauren McLaughlin4*
Author Affiliations: *1Dalhousie University, 2IWK Health, 3University of Oxford, 4Maritime SPOR SUPPORT Unit (MSSU), 5Nova Scotia Health*

Background and Objectives: Learning Health Systems (LHSs) seek to rapidly generate and apply evidence in clinical practice. Many Canadian-made LHS models call for active engagement with patients and publics (herein 'contributors'), yet there is little guidance about how to do this and how engagement may differ in these settings. This review aims to examine engagement activities in existing and emerging LHSs for insights into the roles that contributors can play in creating patient-oriented and equitable LHSs.

Approach: A narrative review was conducted using the PerSPEcTiF framework. Search terms were identified for three domains (contributors, LHSs, engagement); the search strategy was reviewed by two health librarians. Four databases were searched (PubMed-MEDLINE, CINAHL, PsycINFO, Embase). Articles were screened using a domain-based rubric and sampled for richness. Data was extracted including who was engaged, when, where, and how. Engagement activities were coded inductively, then deductively using the IAP2 Spectrum of Public Participation. Boell and Cecez-Kecmanovic's hermeneutic method was used throughout and to synthesize contributor roles. One reviewer performed all steps, with input from an advisory group including a Patient Partner.

Results: Thirty-six articles describing engagement in 30 LHSs were included. Findings characterize the literature and report on each PerSPEcTiF domain. In all, 192 engagement activities were coded to create a taxonomy of engagement; 139 activities were also coded to a position on the IAP2 Spectrum. Contributors' influence over decision-making was often unclear or limited, with engagement frequently occurring after LHS implementation. However, LHSs also offered unique opportunities for contributors to be engaged in deliberative system design and effect change through distributed leadership. Ten flexible and overlapping roles were identified for contributors, serving three functions: System Shapers (designing and defining LHS), Community and Capacity Builders (expanding and supporting LHS), and Implementers (hands-on efforts). Participatory community engagement was more common amongst LHSs explicitly addressing health inequities.

Conclusion: To our knowledge, this review provides the first overview of engagement practices in LHSs. These practices build on and are constrained by engagement traditions in research and quality improvement. Findings offer practical examples to support LHS implementation, and a starting point for designing meaningful roles for contributors in LHSs.

Exploring the experiences of primary care providers and their perceptions of providing linguistic and culturally discordant care in a primary care setting: A secondary data analysis

Presented by: Maya Gibb

All Authors*: Taraneh Tabatabaei1, Camilia Thieba1, Sathya Karunananthan1, Maya Gibb2, Krystal Kehoe MacLeod3, Lina Shoppoff1*
Author Affiliations: *1University of Ottawa, 2Ottawa Hospital Research Institute, 3Bruyere Research Institute*

Background and Objectives: Patients who do not speak the same language as their health care provider experience worse health outcomes than patients who do. This study applied an equity lens to a reflexive thematic analysis of existing interview data to explore the experiences and perceptions of primary care providers who provide linguistic and culturally discordant care and how it impacts working conditions and quality of care.

Approach: This secondary analysis used data from a qualitative study that consisted of one-hour, virtual semi-structured interviews with primary care providers (n=12) working in an interdisciplinary Family Health Team setting in Ottawa, Canada. Study participants were purposively sampled to gather a range of experiences and perspectives from different provider groups, at different career levels, with diverse demographic profiles. Using an equity lens, interview transcripts were analyzed using reflexive thematic analysis guided by Braun and Clarke's method which includes generating initial codes, searching for themes, reviewing themes, and defining themes that represent responses within the data set.

Results: Insufficient time emerged as the primary barrier to optimal working conditions and high-quality care from the perspectives of primary care providers providing care across language and cultural barriers. Insufficient time was exacerbated by the intersection of language, culture, and a lack of health literacy which increased the complexity of patient encounters. Repetition of information was identified as a strategy to overcome language discordance, although this increased the length of time needed for effective clinician-patient interactions. When faced with time constraints, providers reported that they often asked fewer questions, avoided complex topics, and expressed concern that mutual understanding was not achieved during language discordant appointments. Ultimately, insufficient time was reported to contribute to concerns about lower quality of care for patients from linguistic and ethno-cultural minorities.

Conclusion: Navigating the provision of care across language and cultural barriers increases communication challenges and the time needed to assess patients effectively. Our findings suggest that access to translation services and interpreters is helpful, but not an all-encompassing solution. Other options may include matching patients to providers based on language proficiency.

Patients Before Paper (PB4P): An Evaluation Partnership with Women's College Hospital Institute for Health System Solutions and Virtual Care (WIHV)

Presented by: Meghan Gilfoyle

All Authors: *Meghan Gilfoyle1, Altea Kthupi1, 2, Sydney Pearce1, 3, Alana Tibbles1, Onil Bhattacharyya1, 4, Payal Agarwal1, 4*

Author Affiliations: *1 Women's College Hospital Institute for Health System Solutions and Virtual Care (WIHV), 2Dalla Lana School of Public Health, University of Toronto , 3Office of Health System Partnerships, Department of Family and Community Medicine, Temerty Faculty of Medicine, 4Department of Family and Community Medicine, University of Toronto*

Background and Objectives: Patients Before Paperwork (PB4P) aims to improve the use of digital tools in health systems with a primary care focus. The objectives of this evaluation partnership between WIHV and PB4P include: 1) describing the current state of digitizing administrative processes using digital tools (i.e., eReferral, eConsult, HRM and OLIS) in Ontario and other jurisdictions, 2) describing the value proposition of digitizing processes and mechanisms of impact, and 3) developing a preliminary framework for measuring impact.

Approach: To address the three objectives, we will conduct:
1) A rapid realist review to understand the mechanisms by which the different tools (i.e., eReferral, eConsult, HRM and OLIS) impact the three key outcomes of interest (i.e., safety, access and reduction in administrative burden) in various contexts.
2) Ten targeted interviews with physicians to understand how experience, benefits and pain points vary across two different practice types. Data from interviews will then be analyzed thematically.
3) Data triangulation from Objectives 1 and 2.

Results: Anticipated results to be presented at CAHSPR 2024 will include: 1) a program theory to understand the mechanisms by which the different tools impact the three key outcomes of interest in various contexts, 2) an understanding of the barriers and facilitators to adoption and spread and scale within the Ontario context, and 3) a preliminary evaluation framework that aligns with the key value propositions that are credible and feasible to collect at practice, region and system level.

Conclusion: The findings from this research program will lay the foundation for future work in subsequent years where we plan to: 1) study the implementation of digital tools and test the value proposition empirically and 2) measure impact at an institutional, regional and system level across the Quintuple Aim.

Exploring Disparities in Mental Health Care Among Racialized Youth: A Mixed-Methods Approach

Presented by: Jaspreet Gill

All Authors: *Jaspreet Gill1*
Author Affiliations: *1university of calgary*

Background and Objectives: Racialized youth from Black, Chinese, and South Asian populations access mental health services less frequently and face systemic barriers (e.g., wait times, financial barriers, etc.). Despite comprising a significant portion of the population, there is limited research quantifying whether current mental health care (MHC) in Canada is accessible and adequate (i.e., meeting needs). The objective of the study is to understand potential disparities in access to adequate MHC for Black, Chinese, and South Asian youth.

Approach: An explanatory sequential mixed-methods design will be employed. For the quantitative component, microdata from the 2022 Mental Health and Access to Care Survey (MHACS) will be obtained and utilized from the Statistics Canada's Research Data Centre (RDC). Microdata will be analysed using descriptive and inferential statistics. The youth examined will be 15 to 24 years old identifying as Black, South Asian, or Chinese. For the qualitative aspect, 12 semi-structured interviews will be used deepen understanding of barriers and facilitators to MHC access among Black, South Asian, and Chinese youth. Semi-structured interviews will be analyzed using thematic analysis.

Results: It is hypothesized that disparities in access will be present for Black, South Asian, and Chinese youth. Similarly, it is hypothesized that needs for mental health support will be unmet and youth may indicate that services are inadequate. Similarly, financial burdens, stigma, and lack of representation may be barriers to accessing MHC. Whereas community education on available resources, mental health promotion, and family support may be facilitators to access. Anticipated results will create a better understanding of disparities present in MHC access and services. Results will contribute to understanding how we can better meet mental health needs of Black, South Asian, and Chinese youth. Findings are anticipated to inform practice of mental health professionals (e.g. primary care physicians, psychologists, etc.) and structure of services offered.

Conclusion: This research will help quantify and explore disparities in access to mental health care services among Black, South Asian, and Chinese youth in Canada. It will also deepen understanding of barriers and facilitators to access. All of which will inform future mental health services.

Shaping Thematic Analysis through Crowdsourcing: A Methodological Inquiry into the Use of Qualtrics for Studying Public Health Communication

Presented by: Amber Gillespie

All Authors*: Jillian Stringer1, Andrew Papadopoulos1, Amber Gillespie1*
Author Affiliations: *1University of Guelph*

Background and Objectives: As social media has become an essential channel for disseminating health information by health systems, it has also evolved into a valuable reservoir for research data. However, analytic approaches to this 'big data' are not without challenges, including cost, digital accessibility, and reliance on software solutions. This research therefore aims to assess the feasibility and effectiveness of using Qualtrics, an online survey platform, as a crowdsourcing tool for social media data analysis.

Approach: Using X (formerly known as Twitter), all 'posts' (Tweets) related to the COVID-19 pandemic were extracted from seven Southern Ontario health units from January 2020 to December 2023. A Python script was written to automate uploading of the posts to the Qualtrics platform. Undergraduate and graduate students were then recruited from a university department to participate in data coding. Respondents assigned themes to a sample of posts by selecting from a tailored list of predefined codes or providing their own. To assess the effectiveness of this novel approach, an interrater reliability (IRR) analysis will be performed.

Results: Research is currently in progress, though we will have enough data to either report the full results, or preliminary results. IRR analysis will provide evidence regarding the quality of thematic data coding conducted through crowdsourcing. The results are expected to provide insight for researchers looking to explore accessible, cost-effective methods for working with big data. Access to the source code may also be made available.

Conclusion: Pending

Evaluating Health Organization Readiness for Implementing a Learning Health System: A Multi-method Study to Inform Questionnaire Development

Presented by: Catherine Giroux

All Authors: *Hervé Tchala Vignon Zomahoun1, Catherine Giroux1, Mohammed Al Khaldi1, Marie-Eve Poitras2, Sophie Boies3, Paula Bush1, Sara Ahmed1, Pascaline Kengne Talla1, Yves Couturier2*
Author Affiliations: *1McGill University, 2Université de Sherbrooke, 3Unité de soutien SSA Québec*

Background and Objectives: Adopting a learning health system (LHS) is a promising approach to bridging knowledge between policymakers, health and social services system managers and professionals, researchers, and patients and their families. The aim of this study was to develop a measure to help health organizations assess their level of readiness to implement an LHS.

Approach: We conducted an integrative literature review to identify items relevant for developing the content of our readiness questionnaire. We searched PubMed and the Learning Health Systems Journal from inception to 2023, including English and French publications that addressed the definitions, frameworks, characteristics, barriers, and facilitators of an LHS. We also sought tools for evaluating organizational readiness to implement an LHS. We used the findings of the review to identify the key domains, subdomains, and items that would be measured using our readiness tool. We consulted with researchers, clinicians, and patient partners to confirm relevance and appropriateness of the preliminary questionnaire.

Results: Of the 28 included articles, 16 provided a definition of LHS-eight of which were based on the Institute of Medicine's definition (i.e., where science, informatics, incentives, and culture are aligned for continuous improvement and innovation). 16 articles provided domains associated with an LHS framework that informed our questionnaire. These included data to knowledge, knowledge to practice, practice to data, and core values. Key barriers to adopting an LHS included financial constraints, time, and the complexity of the task; facilitators included financial incentives, government mandates, and consistent implementation across centres. A preliminary questionnaire intended to assess organization readiness to implement an LHS was created based on these findings and will undergo item refinement and content validation through a Delphi approach.

Conclusion: This study comprised an integrative review to inform the development of key domains, subdomains, and items intended to assess organizational readiness to adopt an LHS. Future research will refine and validate our questionnaire items with local, national, and international experts involved in LHS practice, research, and policy.

Feasibility testing of a co-designed person-centred intervention to promote exercise and physical activity in persons of South Asian origin following total knee arthroplasty

Presented by: Laurie Goldsmith

All Authors: *Linda Li1, Chiara Singh2, Ila Hajirakar3, Arun Garg2, Nitya Suryaprakash1, Heather King1, Santosh Powar3, Sean Brown2, Rick Sawatzky4, Sara Guilcher5, Laurie Goldsmith6, Jackie Whittaker1, Michele Montgomery2, Stirling Bryan1, Marie Westby1*
Author Affiliations: *1University of British Columbia, 2Fraser Health Authority, 3unaffiliated/patient research partner, 4Trinity Western University, 5University of Toronto, 6Simon Fraser University*

Background and Objectives: Persons of South Asian (SA) origin who had total knee arthroplasty (TKA) previously identified promotion of exercise and physical activity during the post-TKA active living phase as their highest research priority. Using co-design, we developed the South Asian Exercise Research (SAER) intervention—a culturally relevant, 12-week program of supervised group-based knee-specific exercise and physical activity classes, group educational sessions, and one-on-one telephone coaching. We evaluated the SAER intervention using Bowen et al.'s feasibility framework.

Approach: The SAER intervention was run twice (once in English, once in Punjabi). Eligible participants were SA adults who had a TKA in the past year, were at least 8 weeks post-op, had completed their post TKA physiotherapy, and were medically cleared to participate.
Potential participants were recruited through outpatient programs and word-of-mouth. Feasibility testing focused on five areas (acceptability, demand, implementation, practicality, limited-efficacy testing). Qualitative and quantitative data collection included semi-structured interviews with SAER participants and providers, pre- and post-intervention patient-reported outcome measures (PROMs) and performance-based measures, intervention component costs, tracking of adverse events, and recruitment, retention, and attendance data.

Results: We approached 30 individuals, resulting in 18 individuals participating in the SAER intervention. Three registrants dropped out before starting the program. The remaining participants attended a mean of 16/24 classes (67%; minimum 2, maximum 24). All participants who provided post-intervention qualitative and quantitative data (n=14) reported being very satisfied or satisfied with the program, improved understanding of the importance of exercise and how to exercise, and increased confidence in continuing exercise after program completion. Physical activity in daily activities increased for some but not all participants. Participant's qualitative assessments and PROM and performance-based test data showed improvements in pain, function, mobility, and strength. There were no adverse events. Some program components were challenging to deliver due to literacy levels and time constraints.

Conclusion: Feasibility testing of the SAER intervention demonstrates acceptability, demand, and limited-efficacy. Implementation and practicality suggestions include increased language support. This culturally-relevant intervention has notable physical and psychosocial benefits for SA persons in the active living phase of TKA recovery, especially those discharged from rehabilitation with low levels of functioning.

Supporting Socially Accountable Practice Among Early-Career Family Physicians in Canada: Findings of a multi-provincial qualitative study

Presented by: Amanda Gormley

All Authors*: Ruth Lavergne1, Catherine Moravac2, Amanda Gormley3*
Author Affiliations: *1MSc, PhD, Tier II Canada Research Chair in Primary Care, Associate Professor, Primary Care Research Unit, Department of Family Medicine, Dalhousie University, 2BSc, MSc, Research Associate, Primary Care Research Unit, Department of Family Medicine, Dalhousie University, 3B.Sc, Medical Student, Faculty of Medicine, Dalhousie University*

Background and Objectives: Social accountability refers to the social contract that medicine has with society, and is core to family medicine. It includes the obligation of family medicine to meet the needs of both patients and the broader communities. This analysis explored policy barriers to socially accountable practice described by early career family physicians (ECFP) and informs practice organization, remuneration, and educational policies that can more fully support social accountability in primary care.

Approach: This is a descriptive study focusing on primary care, social accountability, health policy, and healthcare reform. ECFPs from Nova Scotia, Ontario, and British Columbia completed semi-structured, one-on-one, in-depth, telephone interviews. Participants of varied demographics and practice characteristics were selected in order to examine a wide range of perspectives and circumstances. Interviews asked about both ideal and current practice, and factors shaping practice choices. Transcripts from 63 ECFP interviews were analyzed using reflexive thematic analysis. Themes addressing barriers to social accountability faced by ECFPs were developed, edited, and refined, with attention to associated policy supports for socially accountable practice.

Results: Many ECFPs envisioned ideal practices with social accountability at the forefront, but described payment and practice models as a barrier to such optimal delivery of care. Some ECFPs found that fee-for-service limited their time with patients, and felt that alternative payment models would be more consistent with their ideal practice. Practice model, and lack of access to team supports in particular, limited capacity to more comprehensively meet the needs of patients and communities. At the same time, ECFPs often felt they lacked personal knowledge, time, and opportunity to influence policy, including policies to shape primary care organization and remuneration, and policies that more directly influence social and structural determinants of health.

Conclusion: While many ECFPs describe socially accountable practice as an ideal, they identify policy and remuneration barriers as preventing them from providing this optimal care, and feel they lack knowledge and opportunity to shape policy. This can inform both primary care service planning and family medical education.

MEDIA NEWS COVERAGE ON THE 2021 HEAT DOME AND HOMELESSNESS IN CANADA

Presented by: Nicholas Goulet

All Authors: *Emily J. Tetzlaff1, 2, Farah Mourad1, Melissa Gorman2, Nicholas Goulet1, 2, Rachel Siblock2, Mariya Bezgrebelna3, Sean A. Kidd3, 4, Glen P. Kenny1, 5*
Author Affiliations: *1School of Human Kinetics, Faculty of Health Sciences, University of Ottawa, Ottawa, Ontario, Canada, 2Climate Change and Innovation Bureau, Healthy Environments and Consumer Safety Branch, Safe Environments Directorate, Health Canada, Ottawa, Ontario, Canada, 3Slaight Family Centre for Youth in Transition, Centre for Addiction and Mental Health, Toronto, Ontario, Canada, 4Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada, 5Clinical Epidemiology Program, Ottawa Hospital Research Institute, Ottawa, Ontario, Canada*

Background and Objectives: People experiencing homelessness are among the most vulnerable to heat. However, during the 2021 Heat Dome, the deadliest heat event recorded in Canada, they represented the smallest proportion of decedents (n = 3, 0.5%). Due to this stark difference in mortality compared to other heat events globally, we sought to analyze news coverage of the 2021 Heat Dome to identify potential actions or initiatives aimed at supporting this population that may have offered additional protection.

Approach: We explored a subset of news media articles (n = 274, 9%) related to homelessness which were identified using articles collected for a previous systematic review of Canadian digitized news media (e.g., newspaper articles, radio broadcasts) from five subscription news databases and an extensive grey literature search (n = 2909). The articles were published before, during, and after Environment and Climate Change Canada's forecasted heat alert was issued in June 2021 until February 2022. The articles were qualitatively coded and thematically analyzed in NVivo to identify repeated patterns of meaning across the dataset.

Results: Three main themes were identified within news articles related to the 2021 Heat Dome and homelessness in Canada. The first theme highlighted how public warnings issued through the media included people experiencing homelessness as a heat-vulnerable group among others (e.g., older adults, people living alone). The second theme captured content related to community support services that were activated to explicitly support people experiencing homelessness, such as water provisions, access to air-conditioned or cool spaces, and outreach programs aimed at providing heat-event relevant information or wellness checks. The third theme focused on the challenges and barriers faced by people experiencing homelessness during extreme heat events, including access to cooling centres outside of standard business hours and stigma towards those experiencing homelessness when accessing heat mitigation services.

Conclusion: Our findings indicate that mass-media messaging and dedicated on-the-ground initiatives may assist in limiting heat-related health impacts on people experiencing homelessness. With extreme heat events increasing in regularity and severity, there is a need to refine heat-health policies to better protect the lives of Canada's growing homeless population.

SHARING THE VOICES OF FIRST RESPONDERS: MEDIA-BASED COMPOSITE NARRATIVES OF EMERGENCY MEDICAL SERVICE PROVIDERS DURING THE 2021 HEAT DOME

Presented by: Nicholas Goulet

All Authors: *Brooks Hogya1, Emily J. Tetzlaff2, 3, Melissa Gorman3, Nicholas Goulet2, 3, Glen P. Kenny2, 4, Casey Cassan2*
Author Affiliations: *1BC Emergency Health Services, Vancouver, British Columbia, Canada, 2School of Human Kinetics, Faculty of Health Sciences, University of Ottawa, Ottawa, Ontario, Canada, 3Climate Change and Innovation Bureau, Healthy Environments and Consumer Safety Branch, Safe Environments Directorate, Health Canada, Ottawa, Ontario, Canada, 4Clinical Epidemiology Program, Ottawa Hospital Research Institute, Ottawa, Ontario, Canada*

Background and Objectives: With 103 all-time heat records broken during the 2021 Heat Dome in Canada, emergency dispatchers received an unparalleled increase in 911 calls for ambulance, police, and fire services to attend to hundreds of heat-vulnerable community members experiencing heat-related health impacts. To better understand the experiences of first responders working during extreme heat, we conducted a Canada-wide scan of media articles on the 2021 Heat Dome and developed composite narratives of first responders.

Approach: We explored a subset of news articles (n = 433, 18%) related to first responders which were identified through a previous systematic review of Canadian media (e.g., newspaper articles, radio broadcasts) published before, during, and after Environment and Climate Change Canada's forecasted heat alert (June 2021 to February 2022) (n = 2909). A qualitative content analysis method was used to code the data in NVivo. Four composite narratives using quotations from various locations, departments, and media interviewees were developed to tell a story framed as that of a single entity. The Job Demands-Resources model of occupational burnout was also applied.

Results: Four first responder narratives (firefighters, police, paramedics, dispatchers) are presented to convey the findings from the coded data. The composite narratives highlight that emergency medical service providers faced i) record-breaking call volumes and patient events due to the extreme heat and compounded by the ongoing COVID-19 pandemic and opioid overdose crises, ii) increased mental-health-related claims, and iii) exhaustive heat-related physiological stress. Using the Job Demands-Resources model as a theoretical framework for occupational burnout, we further identified three measures of stressful job demand that may contribute to burnout during extreme heat events: work overload, emotional demands, and physical demands.

Conclusion: Our findings underscore the unparalleled burden that first responders experienced when a record-breaking heat event intersected with an ongoing pandemic, highlighting the importance of supporting first responders during emergency events. Prioritizing planning for such situations will ensure the proactive protection of first responders, and ultimately the public that rely upon.

L'INTERSECTION DE LA PANDÉMIE DE COVID-19 ET DE LA CANICULE DE 2021 DANS L’OUEST DU CANADA : UNE ANALYSE DE CONTENU DES MÉDIAS NUMÉRIQUES CANADIENS

Presented by: Nicholas Goulet

All Authors*:* *Glen P. Kenny1, 2, Nicholas Goulet1, 3, Emily J. Tetzlaff1, 3, Melissa Gorman3, Gregory R.A. Richardson3*
Author Affiliations: *1École des sciences de l’activité physique, Faculté des sciences de la santé, Université d’Ottawa, Ottawa, Ontario, Canada, 2Programme d'épidémiologie clinique, Institut de recherche de l'Hôpital d'Ottawa, Ottawa, Ontario, Canada, 3Bureau des changements climatiques et de l'innovation, Direction générale de la santé environnementale et de la sécurité des consommateurs, Direction de la sécurité des milieux, Santé Canada, Ottawa, Ontario, Canada*

Background and Objectives: Pendant la canicule de 2021 dans l’ouest du Canada, 619 personnes sont décédées à cause de la chaleur extrême. Cette catastrophe de santé publique a été aggravée par la pandémie de COVID-19 en cours. Afin de mieux comprendre les impacts associés à l'intersection de ces crises de santé publique, cette étude a exploré la communication médiatique en matière de santé publique au Canada pendant la pandémie de COVID-19 et la canicule de 2021.

Approach: Nous avons exploré des articles de presse (n = 520, 18%) liés à la canicule de 2021 et au COVID-19 qui ont été identifiés lors d’une revue systématique des médias numérisés canadiens (n = 2909). Les articles (p. ex. articles de journaux, émissions de radio) ont été publiés avant, pendant et après l'alerte de chaleur annoncé par Environnement et Changement climatique Canada en juin 2021 jusqu'en février 2022. Les articles ont ensuite été codés qualitativement dans NVivo, par suite d’une analyse thématique afin d'identifier des thèmes répétés dans l'ensemble des données.

Results: Les articles liés au COVID-19 et à la canicule de 2021 ont souligné l'importance des crises de santé publique qui se croisent, mettant en évidence le fardeau pour les systèmes de santé. Toutefois, plusieurs articles ont fourni des messages contradictoires en matière de santé recommandant par exemple l'accès à des espaces intérieurs frais (atténuation de la chaleur), tandis que d'autres conseillaient d'éviter de se rassembler à l'intérieur (atténuation du COVID-19). En outre, les articles ont montré comment la pandémie a pu exacerber les impacts de la canicule, car les mesures de santé publique liées à la pandémie ont pu dissuader les gens de se protéger contre la chaleur. La pandémie aurait pareillement exacerbé les impacts des événements météorologiques qui ont suivi la canicule de 2021.

Conclusion: Cette étude éclaire les impacts cumulés de la canicule de 2021 et de la pandémie de COVID-19. Chaque crise a entraîné l'aggravation des effets sur la santé de l'une et de l'autre, soulignant l’importance de mettre en place des plans de préparation et développer des messages de santé publique cohérents.

Understanding preferences for Rapid Access Addiction Medicine clinics for problematic alcohol use

Presented by: Alyssa Grant

All Authors: *Nathorn Chaiyakunapruk1, Mackenzie Dowson2, Justin Presseau2, Surachat Ngorsuraches3, Alyssa Grant2, Kelly Suschinsky4, Gord Garner5, Amelia Palumbo2, Kednapa Thavorn2, Kim Corace4, Melanie Willows4, Mary Bartram6, Chau Tran2, Brian Hutton2, Sura*

Author Affiliations: *1University of Utah College of Pharmacy , 2Ottawa Hospital Research Institute, 3Auburn University, 4Royal Ottawa Mental Health Centre, 5Community Addictions Peer Support Association , 6Mental Health Commission of Canada , 7Chiang Mai University*

Background and Objectives: Problematic alcohol use (PAU) is a major risk factor for morbidity and mortality globally and the COVID-19 pandemic has exacerbated the consequences and caused abrupt disruptions to its care. Available substance use health services are fragmented, challenging to access, and associated with lengthy wait times. This study describes preferred characteristics of Rapid Access Addiction Medicine (RAAM) clinics for PAU as identified by individuals with PAU and assessed how the COVID-19 pandemic may influence preferences.

Approach: A scoping review and stakeholder meetings were conducted to identify characteristics of substance use health services for PAU that have been reported to hinder or facilitate access to treatment and determine whether and how PAU individuals' experiences differ before and during the COVID-19 pandemic. Following the scoping review and meetings, we conducted an eDelphi survey amongst individuals with PAU to prioritize characteristics of the services that are important and relevant to RAAM clinics in Ontario. We then developed a discrete choice experiment (DCE) survey to measure preferences for PAU service features in scenarios with and without COVID-19 in the community.

Results: The scoping review identified an array of service-level barriers that could prevent treatment accessibility. These included a lack of an obvious entry point, complexity of the care pathway, high financial cost, wait times, lack of geographically accessible treatment, inconvenient appointment hours, poor cultural/demographic sensitivity, lack of anonymity/privacy, lack of services to treat concurrent PAU and mental health problems. Following the meetings, this list of attributes was refined to staff composition and prescribing capabilities, medication coverage, wait time, information access, shared decision making, the range of health services, and the availability of virtual walk-in care. The final list of attributes included in the DCE survey includes service modes available, open hours, wait time, and the availability of peer support workers and shared decision making.

Conclusion: Our scoping review has identified key barriers to accessing substance use health services for PAU. Findings from our studies can highlight which aspects of RAAM clinics, if modified, have the greatest potential to enhance the delivery and accessibility of substance use health services.

Using primary care data to inform expansion of team-based care in Ontario

Presented by: Michael Green

All Authors: *Tara Kiran1, Lynn Roberts2, Kamila Premji3, Michael Green2, Liisa Jaakkimainen4, Paul Nguyen4, Peter Gozdyra4, Rick Glazier1, Eliot Frymire2*
Author Affiliations: *1University of Toronto, 2Queens University, 3University of Ottawa, 4ICES*

Background and Objectives: Team based primary care has been identified as an effective approach to addressing the crisis of access to primary care for all Canadians. The Ontario government has initiated a call for expanding team based care for Ontario residents. To further understand attachment to primary care providers and team-based care, attachment patterns were examined at the forward sortation area (FSA) level, which are geographical regions based on the first 3 characters of the Canadian postal code.

Approach: This serial cross sectional study used linked health administrative datasets in conjunction with measures of attachment to primary care in Ontario, Canada. Attachment categories include team-based care (family health team [FHT] and community health centre [CHC]), attached but no team-based care, and uncertainly attached with or without primary care services. Primary care attachment data on from 2020, and 2022 were mapped to compare key differences spatially. This study looks at the significant equity differences in team-based care at the granular, neighbourhood level in 2020 and 2022. These data were produced to assist with informing team-based care expansion across the province.

Results: From 2020 to 2022, provincial coverage of team-based care remained relatively unchanged from 26.5% (3.88 million residents) to 26.6% (3.97 million residents). However, the overall rate of being uncertainly attached increased from 12.2% (1.78 million residents) to 14.7% (2.20 million residents). Team-based care coverage varied greatly across the province with a low of 4.0% to a high of 86.7% in FSAs in 2022. Spatial visualization of team-based care and other primary care attachment at the FSA level illustrated granular disparities among equity deserving populations and regions. Maps of primary care attachment demonstrated disparities in the distribution of team-based care and identified priority areas including areas of concentration for new immigrants to Ontario and low income residents.

Conclusion: Significant equity differences in team-based care and primary care attachment were identified and mapped, enabling data informed resource allocation decisions including where to locate and expand team-based care in Ontario.

Antibiotic prescriptions patterns by provinces and health provider specialties

Presented by: Drew Greydanus

All Authors: *Glenys Smith1, Drew Greydanus1, Pia Muchaal1, Kahina Abdesselam1, Kathleen Qu1, Shaghig Reynolds1*
Author Affiliations: *1Public Health Agency of Canada*

Background and Objectives: Inappropriate use of antibiotics is a primary driver of antibiotic resistance. In Canada, more than 90% of prescriptions are prescribed in the community, however, a significant knowledge gap exists as to the specialties of the prescribing health-care providers, and reasons for treatment. The objective of the study was to describe prescribing patterns across Canadian provinces and provide insight on the reasons antibiotics are being prescribed.

Approach: This study leveraged the Canadian IQVIA CompuScript dataset which captures information on prescriptions dispensed by retail pharmacies. IQVIA applies proprietary geospatial methodologies to project sales to be representative of all dispensed in Canadian provinces. Dispense are subdivided by prescriber specialty, province, and molecule. Molecules were grouped based on their potential reason for use. Prescribers were grouped into surgical specialties, medical specialties, and family physicians. Non-physician prescribers were looked into by specialty. The number of prescriptions dispensed was standardized by the number of prescribers and the number of inhabitants. This will allow for a comparison with physician prescribers and between groups.

Results: In 2021, Canadian retail pharmacies dispensed 17 million prescriptions with a prescription rate of 42.6 per 10,000 inhabitants and 106.7 per prescriber. Family medicine physicians had the highest rate (196.4 per prescriber). By contrast, the lowest rate, 4.2 prescriptions per prescriber, was among optometrists. Respiratory infections were the most commonly cited condition for prescribing. Family physicians in PEI and Newfoundland had the highest prescribing rates, 4.18 prescriptions per prescriber per 10,000 inhabitants. When comparing means across provinces in each prescriber group, Nurses in New Brunswick appear to prescribe more (2.66 SD away from the mean). The Atlantic provinces appear to prescribe more; where has the central provinces appear to prescribe less, regardless of specialty.

Conclusion: Prescribing patterns varied significantly by province and by specialty within each province. When looking at proxy of indicated use for prescribing, provinces and prescribers tend to have stable trends across all indications. Stewardship initiatives should focus on reducing inappropriate prescribing in all contexts.

Assessing the migrant wage gap in the allied health professional workforce in Canada

Presented by: Neeru Gupta

All Authors: *Neeru Gupta1*
Author Affiliations: *1University of New Brunswick*

Background and Objectives: Numerous studies have shown that newcomers to Canada, as well as to many other high-income countries, earn less on average than their native-born counterparts, including those who are highly educated. However, compared with physicians and nurses, evidence is scant on allied health professionals (AHPs) despite their critical contributions to the healthcare system. The aim of this observational study was to analyze the migrant wage gap among selected groups of AHPs across Canada's urban-rural continuum.

Approach: Sourcing nationally representative data from the Canadian population census, we applied multiple log-linear regressions to assess differentials in annual earnings by adult migrant status among full-time AHPs aged 25-54. The analysis included dentists, pharmacists, and other health human resources providing prevention, diagnostic, therapy and rehabilitation services, as mapped to the National Occupational Classification. Models were adjusted for traditional human capital variables (age, education, class of worker) and social characteristics (gender, ethnicity, marital status, child presence). We further linked the census data to the Index of Remoteness, a geocoded measure capturing dimensions of community accessibility and connectivity.

Results: The proportion of practicing AHPs who had migrated to Canada in adulthood has been increasing over time: from 12.8% in 2006 to 14.0% in 2016. While the AHP workforce remains female-dominated (66.1% women overall), men have been over-represented among adult migrants and experienced a faster pace of growth (from 17.5% to 23.1% over the decade). After adjusting for other professional, personal, and geographic characteristics, a significant migrant wage gap was observed across occupations: adult migrant dentists earned 20% less, pharmacists 22% less, and physical/occupational therapists 24% less than their counterparts who were either Canadian-born or who had migrated in childhood or adolescence (i.e., prior to access to advanced qualifications and economic inclusion in the skilled health labour market).

Conclusion: Actions for health workforce strengthening and equity should address the persistent migrant wage gap among AHPs. More research and policy attention is needed on the distribution and incentivation of AHPs, who are remarkably understudied in terms of remuneration and other factors influencing recruitment and retention to meet population health needs.

Epidemiological analysis of pediatric tuberculosis infection in Saskatchewan First Nation Communities, 2018-2022

Presented by: Sabyasachi Gupta

All Authors: *Nnamdi Ndubuka1, Sabyasachi Gupta2, Ibrahim Khan2, Emmanuel Dankwah1*
Author Affiliations: *1Northern Inter-Tribal Health Authority, 2Government of Canada*

Background and Objectives: Tuberculosis disease (TB) in children under 15 years of age (also referred to as pediatric tuberculosis) is a growing public health concern in First Nations communities. Given the discontinuance of Bacille Calmette-Guérin(BCG) in TB high-incidence communities, it is important to comprehend the social and clinical factors that influence pediatric tuberculosis (PTB) in Saskatchewan First Nation Communities. The purpose of our study was to provide an epidemiological description of PTB among First Nations communities in Saskatchewan.

Approach: We examined the PTB cases reported in Saskatchewan First Nations on-reserve communities from 2018 to 2022 using the provincial TB database and internal line lists. Demographic factors (Age, sex, location, etc.), community-level factors (adequate housing, education, and income) and clinical factors (such as- disease site, treatment status, co-morbidity, hospitalization status) were considered for estimating risk. We employed descriptive statistics to understand the PTB epidemiology in these susceptible population.

Results: In total, 60 PTB cases were reported and all of them were from northern and remote communities. The estimated PTB case rate was 75.6 cases/100,000 population per year. Children under the age of five years accounted for the majority (55%) of PTB cases and males accounted for 60% of PTB cases. Almost all PTB cases (98%) are from TB high-incidence communities. Majority (85%) of the PTB cases were identified through enhanced contact tracing investigations (including social network tracing) and only 2% of the PTB cases were identified through school-based screening. Eight-five percent of PTB cases were pulmonary TB and 25% of the PTB cases were ever hospitalized. Of all PTB cases, 71% had completed recommended therapy, while 27% were still receiving treatment for the disease.

Conclusion: PTB cases among Saskatchewan First Nations are increasing, especially among children under the age of 5years. There are disparities in PTB cases, with some demographic groups and geographical areas having a greater incidence of the disease. Decreasing the disease burden can be achieved by combining community and person-driven TB initiatives.

Impact of COVID-19 on Gestational Diabetes Mellitus screening in Ontario: A mixed-methods study

Presented by: Dima Hadid

All Authors: *Dima Hadid1, Cassandra Kuyvenhoven1, Rebecca Correia1, Andrea Carruthers1, Michelle Howard1, Devon Greyson2, Sarah D. McDonald3, 4, Meredith Vanstone1*
Author Affiliations: *11. Department of Family Medicine, McMaster University, Hamilton, Canada, 22. School of Population and Public Health, University of British Columbia, Vancouver, British Columbia , 33. Departments of Obstetrics & Gynecology, Radiology, McMaster University , 44. Department of Health Research Methods, Evidence & Impact, McMaster University*

Background and Objectives: Gestational diabetes mellitus (GDM) is a common complication of pregnancy leading to increases in adverse outcomes for both infants and birthing people if not treated early. The COVID-19 pandemic strained healthcare and laboratory services, including GDM screening. Adapted GDM screening guidelines were introduced in some jurisdictions to respond to this circumstance. This research examined changes in uptake, modalities, and experiences of GDM screening in Ontario, Canada prompted by changes related to the COVID-19 pandemic.

Approach: This convergent mixed-method study involved a population-based retrospective cohort analysis of Ontario health administrative data to describe and compare gestational diabetes screening rates for live, in-hospital births before the COVID-19 pandemic (Jan 1-March 31, 2019) and at two points within the pandemic (Jan 1-March 31, 2020, 2021). Outcome measures included five different modalities for GDM screening aligned with traditional and pandemic-adapted screening guidance. Qualitative descriptive data were gathered on individual experiences and decision-making processes of GDM screening of participants with live, in-hospital births in Ontario between May 2020 and December 2021. Data was integrated in the design and interpretation phases.

Results: Quantitative results showed a small but statistically significant increase in GDM screening rates during the pandemic, with rates increasing from 93.1% in 2019 to 96.1% in 2022. GDM screening modalities shifted during the pandemic with the use of the COVID-19 alternative screening strategy (HbA1C and random plasma glucose tests) increasing from 19.2% to 29.8% over the same period. Qualitative results showed that participants perceived GDM screening as a mandatory directive from their clinicians, aligned more closely with an 'informed consent' model rather than an 'informed choice' model of decision-making. Participants did not report discomfort with their clinicians' recommendations, generally framing screening modality as a specialized decision.

Conclusion: Despite the health system challenges posed by the COVID-19 pandemic, GDM screening completion increased, demonstrating the success of adapted GDM screening guidelines in getting people screened. Decisions about screening modalities were driven by clinician expertise, and patient participants were satisfied to provide informed consent to these recommendations.

Using eConsult to access specialist advice for persons living with dementia - A cross-sectional analysis

Presented by: Ramtin Hakimjavadi

All Authors: *Amy T Hsu1, 2, Sathya Karunananthan1, 3, Mohamed Gazarin4, Stefan de Laplante2, 5, Danica Gouley1, Celeste Fung6, Frank Knoefel1, Sheena Guglani1, Clare Liddy1, 2, Mwali Muray7, Douglas Archibald1, 2, Deanne Houghton1, Claire Godard-Sebillotte8, Helene O'*

Author Affiliations: *1Bruyère Research Institute, 2University of Ottawa, Department of Family Medicine, 3University of Ottawa, Interdisciplinary School of Health Sciences, 4Centre of Excellence for Rural Health and Education, Winchester District Memorial Hospital, 5Hôpital Montfort, 6St. Patrick's Home of Ottawa, 7University of Ottawa, School of Nursing, 8McGill University, Department of Medicine, Division of Geriatrics, 9Ottawa Hospital Research Institute, 10University of Ottawa, Faculty of Medicine*

Background and Objectives: Dementia affects nearly half a million Canadians. Though dementia can be managed in primary care, the complexity of the condition and high prevalence of multimorbidity often require advice from a variety of specialists. eConsult is a secure web-based platform that may make communication with specialists more accessible for primary care providers (PCPs). We examined how eConsult is being used in the care of persons living with dementia (PLWD).

Approach: We conducted a cross-sectional study of eConsult cases closed in 2021 from the Champlain region in Eastern Ontario for PLWD living in the community and in long-term care (LTC). We collected basic eConsult service utilization data, including the specialty group consulted and specialists' response time, as well as PCP's responses to a close-out survey to describe their experience with eConsult. Our team of clinicians coded the questions and responses using validated taxonomies adapted to this study, using iterative discussions to achieve consensus. We provide descriptive statistics of the service utilization and taxonomy results.

Results: Our sample included 97 cases from the community and 53 cases from LTC. PCPs' questions were directly related to the patient's dementia in 30% of community cases (n=29), compared to 15% in LTC (n=8). Specialists responded to all cases in a median of less than 1.2 days, and often considered the patient's dementia in their responses (community: 46% [n=45], LTC: 38% [n=20]). PCPs indicated that an in-person referral was avoided in 39% of community cases (n=38) and 41% of LTC cases (n=22). Geriatrics was the most frequently consulted specialty from the community (18%, n=17), and dermatology from LTC (30%, n=15). Resources, services or assistance for caregivers of PLWD were discussed by PCPs/specialists in 32% of community cases (n=31) and 26% of LTC cases (n=14).

Conclusion: PCPs are using eConsult to access different specialists for different care issues depending on if the PLWD is living in the community or LTC. eConsult facilitates prompt response and supports PCPs in managing complex conditions, thereby reducing the potential wait times for, and travel burden on, this vulnerable population.

Have switching policies led to increased healthcare resource utilization and cost? Evidence from British Columbia

Presented by: Mark Harrison

All Authors: *HaoHung Dang1, Michael Law1, Nick Bansback1, Mark Harrison1, Sandra Blitz2*
Author Affiliations: *1University of British Columbia, 2Centre for Advancing Health Outcomes*

Background and Objectives: The concern that switching patients inflammatory diseases from originator biologics to biosimilars can increase health care resource utilization (HCRU) such physician visits and hospitalizations, is one reason jurisdictions have been slow in mandating biosimilars policies. We analyzed administrative data from British Columbia for changes in HCRU where, in the past 5 years, policies have led to patients with inflammatory skin disease (ISD), joint (IJD) and bowel (IBD) being switched to biosimilars for non-medical reasons.

Approach: We used population-based, administrative databases from Population Data BC holdings between 2015-2021 to extract data for individuals with ICD codes of interest. Individuals were assigned into cohorts based on existing case definitions for individual diseases within. We included individuals in each cohort who were using an originator version of the TNF antagonist (etanercept, infliximab or adalimumab) prior to the mandatory switch policy; policy implementation dates were disease cohort and originator TNF agonist specific. We assessed the pre- and post-switch trend by treatment and cohort in HCRU, including physician visits, hospital days, emergency visits, and other medications, and estimated a total cost.

Results: We included 6955, 2681, and 6285 patients in the IJD, ISD, and IBD cohorts respectively. Based on descriptive statistics, we found no important changes in physician visits, hospital admission, or emergency visit following the switch for all three cohorts. Overall, we did not observe an important change in HCRU costs due to the switch, but did identify a historical trend in decreasing hospitalisations, particularly for the IBD cohort. This suggests a time series analysis that accounts for underling trends is required to ascertain if changes in HCRU occurred. We are currently developing an interrupted time series analysis to determine this effect.

Conclusion: This study suggests concerns about biosimilar switch policies creating increases in other HCRU appears unfounded. Future interrupted time series analysis will clarify if the changes in HCRU are meaningful. Policy-makers can feel confident that mandatory switching biosimilar polices will lead to large uptake of biosimilars, without increases in other resources.

Primary care team funding and practice models across Canadian jurisdictions: an environmental scan

Presented by: Lindsay Hedden

All Authors: *Maria Mathews1, Sarah Spencer2, Emily Gard Marshall3, Lindsay Hedden2, Dana Ryan4, Tai Hollingbery2, Leslie Meredith1, Vanessa Tremblay-Vaillancourt5, Richard Buote3, Marie-Eve Poitras5, Jennifer Xiao1*
Author Affiliations: *1Western University, 2Simon Fraser University, 3Dalhousie University, 4Memorial University, 5Université de Sherbrooke*

Background and Objectives: Over the past twenty years, Canadian provinces and territories have implemented successive waves of primary care reforms in which a consistent focus has been the transition to interdisciplinary care teams. How these teams are composed, organised, and remunerated has varied both within and across jurisdictions, impacting their functioning, performance, and the integration of family practice registered nurses. Our objective was to identify and describe existing primary care team funding and practice models across Canada.

Approach: We conducted a series of string term, targeted website, and snowball searches to locate sources identifying and describing funding and practice models in Canadian provinces and territories between March and September 2022. We screened sources according to our practice and funding model criteria and extracted results for the following data: name, date introduced, jurisdiction, breadth of availability, number of clinics, type of clinic funding, physician and registered nurse remuneration forms and sources, available team supports, and eligibility conditions. We consolidated all data extractions, first by jurisdiction and then by model, and then conducted targeted searches to fill in missing information.

Results: We identified and extracted data from 169 sources across all jurisdictions, with some sources containing data for multiple jurisdictions and models, resulting in 294 individual extractions. Despite subsequent targeted searches and consultation with content experts to validate our results and identify missing information, we were unable to obtain complete data for all 59 models across 13 jurisdictions. We were able to ascertain the use of billings-based physician remuneration models in nearly all and salary-based models in all jurisdictions, while capitation-based models are available in just over half of the jurisdictions. When and where funding models are implemented frequently depends on the practice model in which physicians work. Whereas, for registered nurses, available data suggests salaried arrangements are the norm - regardless of primary care practice model.

Conclusion: There is substantial variation in primary care funding and practice models that facilitate interdisciplinary care teams, reflecting ongoing primary care reforms that build upon previous reforms and existing systems. This variation, combined with the lack of complete data describing funding and practice models, makes comparison and analysis across models challenging.

“Family doctors are also people”: A qualitative analysis of how family physicians managed competing personal and professional responsibilities during the COVID-19 pandemic

Presented by: Lindsay Hedden

All Authors: *Leslie Meredith1, Maria Mathews1, Judith B Brown1, Lauren Moritz2, Steve Slade3, Amanda L Terry1, Paul Gill1, Jamie Wickett1, Samina Idrees1, Richard Buote2, Shabnam Asghari4, Julia Lukewich4, Thomas R Freeman1, Dana Ryan4, Sudit Ranade1, Rita M McCracken*
Author Affiliations: *1Western University, 2Dalhousie University, 3The College of Family Physicians fo Canada, 4Memorial University, 5University of British Columbia, 6Simon Fraser University*

Background and Objectives: Family physicians (FPs) fill an essential role in public health emergencies yet have frequently been neglected in pandemic response plans. This exclusion harms FPs’ clinical roles and has unintended consequences in the management of concurrent personal responsibilities, many of which were amplified by the pandemic. Our objective was to explore the experiences of FPs during the first year of the COVID-19 pandemic to better understand how they managed their competing professional and personal priorities.

Approach: We conducted semi-structured interviews with 68 family physicians from four regions in Canada between October 2020 and June 2021. Employing a maximum variation sampling approach, we recruited eligible participants until we achieved saturation. Interviews explored FPs’ personal and professional roles and responsibilities during the pandemic, the facilitators and barriers that they encountered, and any gender-related experiences. Transcribed interviews were thematically analysed.

Results: We interviewed 68 FPs during the pandemic and identified four overarching themes in participants’ discussion of their personal experiences: personal caregiving responsibilities, COVID-19 risk navigation to protect family members, personal health concerns, and available and desired personal supports for FPs to manage their competing responsibilities. While FPs expressed a variety of ways in which their personal experiences made their professional responsibilities more complicated, rarely did that affect the extent to which they participated in the pandemic response. For FPs to contribute fully to a pandemic response, however, they must be factored into pandemic plans. Failure to appreciate their unique role and circumstances often leaves FPs feeling unsupported in both their professional and personal lives.

Conclusion: Comprehensive planning in anticipation of future pandemics must consider FPs’ varied responsibilities, health concerns, and necessary precautions. Having adequate personal and practice supports in place will facilitate the essential role of FPs in responding to a pandemic crisis while continuing to support their patients’ primary care needs.

Gig care work: Opportunity for policy to improve worker protections and healthcare

Presented by: Pamela Hopwood

All Authors*: Ivy Bourgeault1, Basak Yanar2, 3, Ellen MacEachen4, Pamela Hopwood4, Carrie McAiney4, 5*
Author Affiliations: *12. School of Sociological and Anthropological Studies, University of Ottawa, 24. Institute for Work and Health, Toronto, 35. Dalla Lana School of Public Health, University of Toronto, 4School of Public Health Sciences, University of Waterloo, 53. Schlegel-UW Research Institute for Aging*

Background and Objectives: Gig care workers, or independent contractors working via digital platforms, are increasingly providing unregulated personal care work to support healthcare services in hospitals, long term care (LTC) homes and community homecare. Their work includes complex healthcare tasks, but inconsistent titles, duties, and education. There are few work and health policy protections for precarious gig care workers. This research examines gig work arrangements among these unregulated care workers, and the implications for workers and care clients.

Approach: This study examined gig care work in Ontario, Canada. We used Institutional Ethnography to study the industry context, practices and experiences of workers, and function of technology in gig care work. From April 2023 - January 2024, 32 in-depth interviews were conducted with care workers (n=19) and industry informants (n=13) who had expertise with digital platform use, technology and/or staffing to understand the position of care workers within the industry. We used content analysis of participant data and visual mapping to capture the activities and situations of workers within the context of the gig care (homecare, hospital and LTC) industry.

Results: Personal care workers described digital platforms as offering only irregular opportunities, which resulted in insecure work. Despite initial hopes for reliable income, they came to see the work as both a ‘flexible’ job, and an unreliable means of income. Demand for their services was low. Clients in homecare turned to hiring gig care workers as a last resort, when unable to obtain care via provincially funded organizations. Hospitals and LTC homes used gig care workers to fill staffing gaps. They appreciated that platforms offered pre-vetted workers and considered gig care platforms the same as Temporary Employment Agencies. For homecare ‘marketplaces’, platforms charged a fee to workers and clients and for hospitals and LTC they retained a portion of monies paid to obtain workers on demand.

Conclusion: Gig care platforms introduced insurance liability issues and inconsistent providers for hospitals and LTC, via a contingent workforce. There were also additional expenses for hospitals, LTC homes, and clients. Workers faced work and income insecurity. Regulation and enforcement for gig care work could improve protection for workers, clients, and organizations.

Examining single and multiple job holding among the unregulated care workforce in Ontario and British Columbia long-term care homes

Presented by: Chau Huynh

All Authors: *Seles Yung1, Anna Cooper Reed2, Amy Hsu3, 4, Chau Huynh3*
Author Affiliations: *1UBC Centre for Health Services and Policy Research, 2Health Sciences Centre, Winnipeg, Manitoba, 3Bruyère Research Institute, 4University of Ottawa*

Background and Objectives: In Canada, the demand for long-term care (LTC) services is anticipated to increase ten-fold by 2038. The provision of direct care to LTC residents falls primarily on unregulated workers, such as personal support workers (PSWs). Despite their essential work, PSWs face limited job security, with many working multiple jobs and/or more than full-time to earn a living wage. Given the increasingly challenging work environment, understanding multiple job holding among unregulated long-term care workers is necessary.

Approach: This study examines sociodemographic, employment, and self-reported psychosocial and health characteristics of single and multiple job holders among unregulated care workers in Ontario and British Columbia (BC) long-term care homes.
We used survey data collected as part of a prospective cohort study (C19ImmunityStudy.ca) between March 2021 and November 2022. The study population consisted of unregulated care workers in Ontario and BC LTC homes, including PSWs, food service workers, rehabilitation assistants, and recreation assistants. Job holding was defined as the number of jobs held prior to pandemic single-site restriction policies were enacted in each province.

Results: A total of 701 unregulated care workers from 27 Ontario and 12 BC LTC homes were included in our study. Overall, our sample consisted predominantly of PSWs, women, individuals who held a certificate or diploma, and/or worked in urban homes with 100 or more beds. In terms of job holding, 555 workers (79.2%) held a single job while 146 (20.8%) held two or more jobs. Almost 50% of multiple job holders were of Asian descent and nearly 70% were immigrants to Canada, while approximately 50% of single job holders were white and 55% were immigrants to Canada. We found a higher percentage of multiple job holders (38.9%) reported being quite a bit or extremely stressed at work compared with single job holders (27.6%).

Conclusion: We observed a high prevalence of multiple job holding within the LTC sectors in Ontario and BC. Our findings aim to inform LTC workforce planning and supports required given the aging population and growing workforce. Future research is needed to better understand the drivers and impacts of multiple job holding.

The integration process of peer support workers in a community-based primary care clinic offering services to people experiencing homelessness in Montreal [a PhD dissertation proposal]

Presented by: Mathieu Isabel

All Authors: *Mathieu Isabel1, Andrew Pinto2*
Author Affiliations: *1MD, MA, PhD Student, Dalla Lana School of Public Health, University of Toronto, 2MD, CCFP, FRCPC, MSc, MAP Centre for Urban Solutions, St. Michael's Hospital, Unity Health Toronto,*

Background and Objectives: Peer support workers in homelessness are individuals having experienced homelessness in the past, now having enough stability in their life to support people experiencing homelessness. They are integrated in some primary care clinics. Different publications present the outcomes of peer support, but less is known about how these peer workers are integrated within clinical teams. This PhD project explores the implementation process of a peer-support initiative in homelessness in a primary care clinic in Montreal.

Approach: This implementation science project will use the integrated-Promoting Action on Research Implementation in Health Services (i-PARIHS) framework, which helps represent the dynamic interplay of factors that influence the successful implementation of an initiative. This project will use ethnography as a methodology, with methods such as participant-observation and document analysis. Also, semi-structured interviews and focus groups will be conducted with peer-support workers, peoples experiencing homelessness, as well as professionals of the primary care team clinical teams, managers, and community organizations. It will document contexts as well as facilitating and limiting factors that leads to the implementation of this peer-support initiative.

Results: A Montreal local health authority has expressed keen interest in developing such a peer support initiative in homelessness in one of their community-based primary care clinics. This PhD project will take place there. Data collection will be centered around the way these peer-support workers come to be integrated within their primary care team, from the clinical staff, the managers, and the peer support workers' perspectives. Through a detailed exploration and facilitation of the implementation process, the emphasis will be on understanding how the expertise, experience and lay-knowledge of these "non-professional" peer workers are being recognized and valued in a primary care setting mostly designed around professional and medicalized forms of knowledge and practices. Notions of autonomy, collaboration, and institutional support and resistance will be considered.

Conclusion: Integrating peer support workers within clinical teams is now part of different clinical recommendations to address the complexity of homelessness. Yet, it is also important for health care institutions to explore how these peer support workers can be properly and meaningfully integrated for them to fully deploy their unique expertise.

24 hours in Ontario’s Healthcare System: The Ecology of Healthcare Services

Presented by: Liisa Jaakkimainen

All Authors: *Richard H. Glazier1, Danielle Martin1, Paul Nguyen2, Michael E. Green2, Eliot Frymire2, Lyn M Sibley3, Tara Kiran1, Kamila Premji4, Liisa Jaakkimainen5, Imaan Bayoumi2*
Author Affiliations: *1University of Toronto, 2Queen's University, 3OMA, 4University of Ottawa, 5ICES*

Background and Objectives: To guide improvements in healthcare services and the policies which support them, an understanding of where people receive care is needed. All Ontario residents can access physician care, visit the emergency department (ED) and, if needed, received care in the hospital. Family physicians (FPs) provide the vast majority of physician-based primary care in Canada. Our objectives were to examine the average number and type of healthcare services received by Ontarians in a 24-hour period.

Approach: We conducted a cohort study using linked health administrative data. We estimated the average number of healthcare visits over a 24-hour period for Ontario residents between March 1, 2019 to February 29, 2020. We chose these dates to avoid the influence of the pandemic on healthcare services. We extracted data on FP visits (including visits to nursing or long-term care homes), specialist physician visits, ED visits, hospitalizations (inpatient admissions and outpatient surgeries), X-ray, CT and MRI scans, and total hip or knee replacements. All Ontario residents were included in the analysis and specific populations were also examined.

Results: On average in a 24-hour period there were 141,200 FP visits, 71,200 specialist physician visits, 14,700 ED visits, 6,300 hospitalizations, 22,600 X-rays, 6,900 CT/MRI scans, and 130 hip or knee replacements for the entire population. 66.5% of physician visits are with a family physician. There are 10x more family physician visits than ED visits. One-quarter of the FP visits, 40% of the X-ray and CT/MRI scans, and 60% of the hip and/or knee replacements were for the 2.5 million residents aged 65 years or older. Compared to 2002/03, family physician visits increased 3.1% and specialist physician visits increased 31.9%. In 2002/03 there were 1.13% family physician visits/population, compared with 0.97% family physician visits/population in 2019/20. This represents a 14.1% decline.

Conclusion: Family physicians provide by far the largest number of medical services to Ontario residents but growth in those services has been much smaller than in other sectors. Attention to lagging provision of family physician services is needed to sustain a high functioning health care system.

The Social Prescription Playground: Unlocking the Design Potential of Ontario Health Teams

Presented by: Lavania Jeganathan

All Authors*: Katie Dainty1, 2, Lavania Jeganathan2, Kelly Smith2, 3, Kate Mulligan2, 4*
Author Affiliations: *1North York General Hospital, 2University of Toronto, 3Michael Garron Hospital, 4Canadian Institute for Social Prescribing*

Background and Objectives: Social prescription is a feedback-loop process rooted in clinical and community worker collaboration with patients to address social determinants of health. Ontario Health Teams (OHT), which aim to enhance integrated care and address fragmentation, are a promising platform for social prescribing, however it is unclear how OHTs can be leveraged to adopt it. Using a systems approach, we seek to understand barriers and facilitators to adopt social prescription within the East Toronto Health Partners OHT.

Approach: A qualitative descriptive study was conducted by administering semi-structured interviews with employees, including leaders, physicians, health promoters, and social support workers. Data collection continued until thematic saturation for each sub-group, which were defined from the participant's setting (clinical/non-clinical) and their degree of client interaction (direct/indirect). Four subgroups were formed: (i) Clinical-Direct (n=4), Clinical-Indirect (n=5), Nonclinical-Direct (n=0), and Nonclinical-Indirect (n=6). A questionnaire was administered and analyzed using descriptive statistics. Interviews were deductively analyzed, supported with some inductive and latent analysis. Using the Systems Engineering Initiative for Patient Safety Framework, barriers and facilitators were identified across the OHT's work system and processes.

Results: Barriers to adopting social prescribing include people lacking clarity about social prescribing generally and with respect to their roles, existing assets, and shared purpose. Within-OHT fragmentation contributes to weak internal relationships, preventing effective collaboration. Additionally, fragmentation across tools and technologies affects communication, measurement, reporting, and shared decision-making. There is a lack of capacity (i.e., salary, time, staffing) and funding. As for enablers, the OHT has strong outward relationships with community partners. Participants reported interest to learn more and adopt social prescribing. Additionally, the OHT has initiatives underway which can enable social prescribing. Some of these initiatives include home care modernization efforts and their ETHP Collaborate tool. Lastly, participants reported advocating for increased and directed funding to support initiatives which align with social prescribing.

Conclusion: These findings support future OHT design decisions, so the system supports employees and patients to address social determinants of health. Future direction for the OHT includes asset mapping, and understanding their shared priority and steps required to achieve it. Future research capturing patient and caregiver perspectives is essential.

Antibiotic Prescribing in Alberta: Physician Perspectives and Insights for Addressing Antimicrobial Resistance

Presented by: Nicole Kain

All Authors: *Iryna Hurava1, Parisa Hamayeli-Mehrabani1, Nicole Kain1, Karen Smilski1, Fizza Gilani1*
Author Affiliations: *1College of Physicians & Surgeons of Alberta*

Background and Objectives: Antimicrobial resistance (AMR) is a global threat, among the top-ten dangers to public health. In Canada, AMR caused over 14,000 deaths in 2018. 78% of oral antibiotic prescriptions in Alberta, Canada are issued by physicians. One tool that the College of Physicians & Surgeons of Alberta (CPSA) has implemented to address AMR is the MD Snapshot-Prescribing report (MD-SP). This study explores Alberta physicians' views on antibiotic prescribing, AMR, and MD-SP's impact on their prescribing practices.

Approach: We utilized descriptive qualitative inquiry to gain insights into the perspectives of Alberta physicians regarding their antibiotic prescribing practices and the MD-SP; their experiences related to AMR; and their knowledge of antimicrobial stewardship. This qualitative study employed focus group interviews with a purposive sample of physicians. The virtual focus group sessions were conducted through the ZOOM video conferencing platform from May to June 2023. To ensure a comprehensive analysis, each interview was recorded, transcribed, and subjected to thematic content analysis to extract meaningful insights. This study was approved by the University of Alberta's Health Research Ethics Board.

Results: We conducted seven focus group interviews involving 21 physicians, revealing three major themes: (1) physicians' knowledge about antimicrobial resistance and stewardship; (2) antibiotic prescribing practices; and (3) insights from the MD-SP. Physicians provided diverse perspectives on the issue of AMR in Alberta, reflecting varying experiences, challenges, and opinions on the severity of the problem. The study also unveiled significant variability in antibiotic prescribing practices among physicians, influenced by factors such as patient demographics, practice settings, and diverse health issues. Participants suggested targeted interventions directed by CPSA to improve physician prescribing practices. The MD-SP report emerged as a valuable educational and self-reflection tool, facilitating the reduction of unnecessary antibiotic prescriptions, and promoting evidence-based practices.

Conclusion: This study provided valuable insights into physicians' antibiotic prescribing complexities, offering a foundation for future research and interventions to optimize antibiotic use and potentially curb antimicrobial resistance in Alberta. Recommending a breakdown of MD-SP reports by diagnosis, prescribers, practice settings and panel size will help to enhance future report iterations.

Graduated Assessment of Prescribing Practice (GAPP) for a review of Prescribing-related Practice Restrictions

Presented by: Nicole Kain

All Authors*:* *Monica Wickland-Weller1, Karen Smilski1, Nicole Kain1, Parisa Hamayeli-Mehrabani1, Iryna Hurava1, Mark Godel1, Fizza Gilani1*
Author Affiliations: *1College of Physicians & Surgeons of Alberta*

Background and Objectives: The College of Physician & Surgeons of Alberta (CPSA) has the authority to impose practice restrictions, including limitations on prescribing, in response to identified safety concerns within a physician's practice. Addressing gaps in medical knowledge, clinical skills, and professional principles is crucial for guiding underperforming doctors back to safe practice. To fill the existing gap in evidence regarding remedial intervention frameworks for prescription practices, CPSA initiated the Graduated Assessment of Prescribing Practice (GAPP) pilot.

Approach: The GAPP pilot initiated in January 2023, involved six Alberta family physicians with existing CPSA-imposed prescribing restrictions. This ongoing initiative integrates elements like competency assessments, mentorship, and practice restrictions reviews. The six-phase GAPP procedure includes weekly, biweekly, and monthly reviews (phases I-III), facilitated by physician mentors. A standardized worksheet guides mentors during check-in visits. This approach allows for an objective assessment of prescribing practices, focusing on metrics such as adherence to guidelines, patient safety, and documentation practices. The process concludes with a comprehensive report and final recommendation (phases IV-V), followed by post-assessment monitoring potentially leading to revisions in practice restrictions.

Results: All participants provided informed consent for GAPP, aligning with CPSA's commitment to public safety under the Health Professions Act. This comprehensive approach ensures a detailed prescription evaluation, maintaining clarity and consistency through remedial intervention for a smooth transition towards unrestricted prescription. Four participants completed the GAPP program: two successfully resumed unrestricted prescribing with no concerns observed post-removal of restrictions, one obtained a limited return to prescribing practice, and one is pending a review of prescribing restrictions. Another two physicians are currently referred to undergo the GAPP pilot (Jan. 2024). Both quantitative and qualitative analyses will assess program effectiveness and help to identify trends to inform decision-making in the phased approach. Lessons learned will guide future implementations, addressing challenges encountered during the pilot for continuous improvement.

Conclusion: While the GAPP pilot is ongoing, early results suggest a promising intervention for enhancing prescription practices, showcasing innovation in remedial frameworks among active physicians. This ongoing analytical depth not only provides a nuanced understanding of program outcomes but also offers valuable insights for continuous quality improvement and future implementations.

How policy problems and solutions are constructed in the scientific literature: A qualitative analysis of the French Model of opioid use disorder care

Presented by: Kasunka Kankanam Gamage

All Authors: *Shania Liu1, Jenny Wang2, Abhimanyu Sud3, Kellia Chiu3, Kasunka Kankanam Gamage4*
Author Affiliations: *1School of Pharmacy, Faculty of Medicine and Health, The University of Sydney, Sydney, NSW, Australia, 2Faculty of Health Sciences, McMaster University, Hamilton, ON, Canada, 3Department of Family and Community Medicine, Temerty Faculty of Medicine, University of Toronto, Toronto, ON, Canada, 4Section of Public Health & Preventive Medicine, Division of Clinical Sciences, NOSM University, Sudbury, ON, Canada*

Background and Objectives: The French Model of opioid use disorder care is frequently cited to advocate for policy responses to the opioid crisis. Prior research reveals a disproportionate emphasis in such citations on federal regulatory changes, raising concerns about overly narrow interpretations and potential missed opportunities for evidence-informed policymaking. We aimed to analyze how the French Model has been used to construct policy responses to the opioid crisis internationally, exploring how unique contexts may shape them.

Approach: We conducted a qualitative content analysis of scientific references to the French Model, informed by Bacchi's "What is the problem represented to be?" policy analysis approach. We analyzed 120 documents authored by scholars in 21 countries; these were coded in duplicate. The NVivo matrix coding function was used to identify possible problem-solution constructions using main nodes (solution, problem, assumption, context) in each axis. Two concepts were identified inductively to explain problem-solution constructions within their context: 1) cultural enthusiasm versus concern for pharmaceuticals, and 2) top-down, bottom-up and mixed approaches to change. These were intersected to identify six problem-solution configuration types.

Results: Four of the six configurations were represented in the analyzed documents. Configurations A and B emphasize the positive impact of widespread availability of opioid agonist therapy and reflect cultural enthusiasm for pharmaceuticals. Configuration A advocates deregulation of opioid agonists, a top-down approach to facilitate rapid response in the context of overdose crises. Alternatively, Configuration B focuses on bottom-up approaches, suggesting initiatives such as training for healthcare providers in non-crisis situations and where resources were previously allocated through a top-down approach. Configurations C and D highlight consequences of widespread medication availability such as diversion and misuse. While configuration C proposes bottom-up strategies to empower healthcare professionals and ensure safe practices, configuration D combines top-down and bottom-up approaches such as enhanced training, and prescription drug monitoring programs.

Conclusion: Recognizing significance of both top-down and bottom-up approaches to change and maintaining balanced perspective on pharmaceutical interventions are essential for developing effective solutions to address opioid crisis. The schema we developed based on two cross-cutting concepts can be used to foster alternative, context-sensitive policy solutions.

Lactating parents attending the Winnipeg Breastfeeding Centre: a descriptive study

Presented by: Narges Khodabandehloo

All Authors: *Alexander Singer1, Narges Khodabandehloo2, 3, Nathan C. Nickel4, Meghan B. Azad5, Larisa Lotoski6, Christina Raimondi7, Katherine Kearns8*

Author Affiliations: *1Department of Family Medicine, University of Manitoba, Canada, Manitoba Primary Care Research Network (MaPCReN) , 2Department of Community Health Sciences, University of Manitoba, Canada, , 3Department of Community Health Sciences, University of Manitoba, Canada, Manitoba Interdisciplinary Lactation Centre (MILC), Children's Hospital Research Institute of Manitoba (CHRIM), 4Department of Community Health Sciences, University of Manitoba, Canada, Manitoba Interdisciplinary Lactation Centre (MILC), Children's Hospital Research Institute of Manitoba (CHRIM), Manitoba Centre for Health Policy (MCHP), Faculty of Kinesiology and Recreation Management, University of Manitoba, Canada , 5Department of Community Health Sciences, University of Manitoba, Canada, Department of Pediatrics and Child Health, University of Manitoba, Canada, Manitoba Interdisciplinary Lactation Centre (MILC), Children's Hospital Research Institute of Manitoba (CHRIM), 6Department of Pediatrics and Child Health, University of Manitoba, Canada, Manitoba Interdisciplinary Lactation Centre (MILC), Children's Hospital Research Institute of Manitoba (CHRIM), 7Manitoba Interdisciplinary Lactation Centre (MILC), Winnipeg Breastfeeding Centre, Manitoba, Canada, Department of Family Medicine, University of Manitoba, Canada, 8Manitoba Interdisciplinary Lactation Centre (MILC), Winnipeg Breastfeeding Centre, Manitoba, Canada, Department of Family Medicine, University of Manitoba, Canada, Department of Obstetrics, Gynecology and Reproductive Sciences, University of Manitoba, Canada*

Background and Objectives: Only 42% of Manitoban infants meet the international guideline for six months of exclusive breastfeeding; even fewer breastfeed beyond two years as recommended. Breastfeeding difficulties lead to early cessation, highlighting the importance of breastfeeding support. Winnipeg Breastfeeding Centre (WBC) is the sole clinic providing physician-level diagnostic care and management for lactation in Manitoba. To improve the quality of WBC care, we will investigate patients' demographic characteristics and most prevalent breastfeeding difficulties, diagnoses, and interventions.

Approach: This is a retrospective longitudinal study (2017-2023). We will use secondary data from lactating parents referred to WBC by healthcare providers, including obstetricians, family doctors, nurse practitioners and midwives. Data are collected using three methods: 1) A Referral Form capturing the referring clinician type and diagnosis, 2) An Intake Questionnaire including demographic information and breastfeeding difficulties, and 3) Visit Notes containing physician-patient consultations records. Data analysis includes manual data extraction from free text and descriptive statistics (frequency, mean, standard deviation, and incidence). Cohen's Kappa statistic will also be calculated to examine the concordance between the referring and WBC clinicians' diagnoses.

Results: Ethics approvals are in progress, and data from around 4000 consultations (1600 dyads) will be available by February 2024. We will select a representative subset for this study. Results are expected to improve breastfeeding support provision and rates in Manitoba by informing: 1) WBC practices: This work seeks to understand who accesses breastfeeding support services and if referrals occur in a predictable pattern. 2) Healthcare policy in Manitoba: Understanding the patient population will define factors associated with clinic access and enable stakeholders to formulate approaches to improve this. 3) Future research directions: The results of this project will lay the groundwork for exploring further research questions. The study's findings will be directly disseminated to WBC physicians, healthcare providers, breastfeeding and lactation researchers, and policymakers.

Conclusion: Many lactating parents need breastfeeding support, yet there is a limited bandwidth of specialized care providers in this area. This project will help to understand how to optimally apply these limited resources. Understanding patients' demographic/medical characteristics will also help WBC clinicians to tailor their breastfeeding services and improve breastfeeding rates.

Appraising CIHI’s Open-Year Data Quality Products to Improve Hospital Data Quality

Presented by: Tao Kong

All Authors: *Tao Kong1, Carrie Lee1, Michelle Policarpio1*
Author Affiliations: *1Canadian Institute for Health Information*

Background and Objectives: Facilities across Canada submit inpatient, day surgery, emergency, and ambulatory care data to CIHI’s Discharge Abstract Database (DAD) and National Ambulatory Care Reporting System (NACRS). CIHI analyzes data for quality issues and develops Open-Year Data Quality (OYDQ) products to support stakeholders with timely and comprehensive data submissions.
As part of CIHI’s commitment to deliver high-quality information, we evaluated our OYDQ products to better understand our clients, to increase uptake and ultimately, to improve data quality.

Approach: We applied a mixed methods approach to achieve our project objectives. To better understand our clients, we conducted a cross sectional survey using the Questback survey platform. Participants included representatives from submitting facilities, health ministries and other stakeholders involved in data quality and data submission process.
We also gathered product download information to determine whether there was any change in uptake. Specifically, we generated the frequency and proportion of product downloads pre- and post-survey period. Finally, we analyzed the data quality submissions by looking at the proportion of data corrected and facilities correcting data pre- and post-survey period.

Results: Of the 748 facilities invited to participate in the survey, 30% responded and provided feedback. Majority of the respondents were from Alberta and had recorder/submitter roles. Based on respondents’ feedback, most use “OYDQ products for monitoring and improving data quality”.
There was variation observed in product downloads between pre- and post-survey. When comparing February and May for each timeframe, there was a decrease in downloads for both databases pre-survey period while an increase in downloads was observed for both databases post-survey period.
Additionally, there was a decrease in proportions of data corrected and facilities correcting data between pre- and post-survey releases. However, a consistent increase in proportions of data corrected and facilities correcting data were observed towards the year-end closure for both databases.

Conclusion: Survey results emphasize the importance of using OYDQ products for monitoring and improving data quality. To maximize its use, findings also suggest the need to continue to promote OYDQ products to reach target audiences.

Equity in prenatal healthcare services globally: An umbrella review

Presented by: Zeenat Ladak

All Authors: *Stephanie Small1, Mehdiya Hemani2, Alexia Leber1, Nagma Grewal3, Noah M Ivers1, 4, 5, Deena M Hamza3, Celia Laur1, 4, Olesya Falenchuk1, Richard Volpe1, Zeenat Ladak1, 4, Minji Olivia Kim3, Qiuyu Sun3*
Author Affiliations: *1University of Toronto, 2McMaster University, 3University of Alberta, 4Women's College Hospital Institute for Health System Solutions and Virtual Care, 5Women's College Hospital*

Background and Objectives: Equitable access to healthcare during pregnancy contributes to better health outcomes of birthing individuals and infants. Equity is conceptualized as the absence of differences in healthcare access among population groups. Policies are guides for front-line practices and although policies strive to foster equitable healthcare, inequities persist. This umbrella review identifies prenatal healthcare practices, summarizes how equity is reported in patient experiences or health outcomes when accessing or using services, and collates equity reporting characteristics.

Approach: For this umbrella review, six electronic databases were searched (Medline, EMBASE, APA PsychInfo, CINAHL, International Bibliography of the Social Sciences, and Cochrane Library). Included studies were extracted for publication and study characteristics, equity reporting, primary (prenatal care influenced by equity/inequity) and secondary outcomes (infant health influenced by equity/inequity during pregnancy). Data were analyzed deductively using the PROGRESS-Plus equity framework and by summative content analysis to explore equity reporting characteristics. The included articles were also assessed for quality using the Risk of Bias Assessment Tool for Systematic Reviews (ROBIS).

Results: The search identified 8065 articles and 236 underwent full-text screening. Of the 236, 68 systematic reviews were included with first authors representing 20 different countries. The population focus of included studies ranged across prenatal only (n=14), perinatal (n=25), general maternal health (n=2), maternal and child health (n=19), and a general health population (n=8). Barriers to equity in prenatal care included travel and financial burden, culturally insensitive practices that deterred care engagement and continuity, and discriminatory behaviour that reduced care access and satisfaction. Facilitators to achieve equity included innovations such as community health workers, home visitation programs, conditional cash transfer programs, virtual care, and cross-cultural training to enhance patient experiences and increase their access to and use of health services. There was overlap across PROGRESS-Plus factors.

Conclusion: This umbrella review collated inequities present in prenatal healthcare services, globally. Further, this synthesis contributes to future solution and action-oriented research and practice by assembling evidence-informed opportunities, innovations, and approaches that may foster equitable prenatal health services to all members of diverse communities.

A mixed-methods analysis of wellness services available to Indigenous students at Queen's University

Presented by: Claire Lamothe

All Authors*: Julia Moreau1, Dr. Amrita Roy2, Claire Lamothe3, Caroline Instrum3, Joyla Furlano2*
Author Affiliations: *1Queen's University, Dept. of Psychology, 2Queen's University, Dept. of Family Medicine, 3Queen's University, Faculty of Health Sciences*

Background and Objectives: Indigenous postsecondary students encounter distinct challenges related to the legacy of colonization, including integrational trauma, institutional barriers, and racism. Campus support resources are generally modeled after Western approaches to health, which differ from Indigenous perspectives of holistic wellness. The current research aims to capture the experiences of Indigenous students at Queen's University with campus health and wellness services and provide recommendations to address identified gaps in service provision.

Approach: A mixed-methods approach was developed in close partnership with Four Directions Queen's Indigenous Student Centre and Queen's Student Wellness Services, who are involved in all stages of the research. An online anonymous survey was conducted with Indigenous students at Queen's University (n=117) measuring students' knowledge of health and wellness services, frequency of service use, experiences with services, and barriers to accessing services. Descriptive and bivariate analysis was performed using SPSS. Second, culturally-congruent research circles are currently being conducted to inform policy change in programming improvements of campus health and wellness services; these will be transcribed and analyzed thematically using NVivo.

Results: Respondents reported varying levels of familiarity, comfort, and use of campus services. Over half of survey respondents reported hesitation to use campus services due to fears of discrimination and past negative experiences with Western health services. Completed survey and preliminary circle responses revealed preferences for culturally-appropriate services engaging with Indigenous healing practices. Also highlighted were difficulties in booking appointments with campus health and wellness services, and lack of long-term follow-up with counsellors. Regarding Indigenous culturally-oriented wellness programing, circle results indicate that students value community-driven and multidisciplinary approaches. Some students have expressed that not all current programming is inclusive to multifaceted aspects of identity, with concerns of not feeling "Indigenous enough" to access certain services. Students also desire improved advertising of available resources across wellness services.

Conclusion: This study highlights some shortcomings of current health and wellness resources as well as ways to improve services offered to Indigenous students on campus. Implications of these results lend towards the creation of a framework to improve wellness services, policies, and programs offered to post-secondary Indigenous students across the country.

Organizational innovations complementing single points of access for unattached patients in Quebec

Presented by: Catherine Lamoureux-Lamarche

All Authors: *Carine Sauvé1, Aude Motulsky2, Annie Talbot2, Mylaine Breton3, Véronique Deslauriers3, Catherine Lamoureux-Lamarche3, Josée Arsenault4, Mélanie Ann Smithman5, Isabelle Gaboury3, Marie-Pascale Pomey2, Marie Beauséjour3, Maude Laberge6, Sébastien Bergeron3*
Author Affiliations: *1Centre intégré de santé et de services sociaux de la Montérégie-Centre, 2Université de Montréal, 3Université de Sherbrooke, 4Ministère de la Santé et des Services sociaux du Québec, 5University of Toronto, 6Université Laval*

Background and Objectives: The implementation of single points of access (GAPs) has been mandated across Quebec to improve access to healthcare services for unattached patients awaiting attachment to a family physician. GAPs were implemented rapidly without specific guidelines regarding organizational structure or population needs. Therefore, several regions developed complementary innovations to meet the needs of patients in their territories. The objective is to describe organizational innovations implemented in four regions to improve access to services for GAP patients.

Approach: This multi-case qualitative study was conducted in four local health territories in the province of Quebec. Forty semi-structured interviews with healthcare managers, nurses, physicians, other health professionals and administrative clerks were conducted between April 2023 and January 2024. An interview guide was developed based on existing frameworks on the implementation of innovations and the evaluation of the GAPs. A thematic analysis was conducted using NVivo software. Logic models were built to describe innovations implemented to meet the needs of unattached GAP patients. Inductive and deductive approaches were used to develop relevant codes and themes.

Results: One region implemented specific multidisciplinary clinics to respond to the needs of patients with mental health and chronic disorders. These teams included multiple health professionals and were able to completely take charge of patients' care and avoid medical appointments with a physician. Another region implemented a mobile proximity clinic where unattached GAP patients are first evaluated by a paramedic before receiving care from a nurse. Patients needing further care received a medical appointment with a physician. Given that 20-25% of GAP patients call for musculoskeletal problems, one region included a physiotherapist on their team to optimize orientation of patients to the relevant professional. Finally, a pharmacist trajectory was highly developed in three regions to increase engagement of community pharmacists to respond to GAP patients.

Conclusion: Because no guidelines were provided for the organizational structure of GAPs, local teams were innovative in developing new structures to better meet the needs of GAP patients. Descriptions of these five identified innovations are key to inform other regions and provinces of ways to improve access for unattached patients.

Enabling standardized Primary Care Data Collection: Bridging the terminology gap with a Pan-Canadian Value Set

Presented by: Alana Lane

All Authors: *Sharon Baker1, Keith Denny1, Alana Lane1*
Author Affiliations: *1Canadian Institute for Health Information*

Background and Objectives: In primary health care, the accurate representation and interoperability of health concern data are essential for effective patient management. As electronic medical records (EMR) evolve to use SNOMED CT to capture health concern data, there is an opportunity to bridge Canada's primary care data gap and improve standardization. This can be achieved through mapping clinical terms to statistical classifications, thereby facilitating improved data exchange, enhancing clinical decision making, and supporting the physician billing process.

Approach: In Canada, some provinces have developed SNOMED CT-based primary care health concern value sets for use in EMR systems. Such initiatives create opportunities to close the data gap in primary care, by mapping SNOMED CT to ICD-9 and ICD-10-CA, while supporting physician billing (ICD-9) and administrative data needs (ICD-10-CA). To that end, we analyzed existing health concern value sets and collaborated with healthcare professionals to develop a robust pan-Canadian Primary Care Health Concern Value Set (PHCVS). This involved a systematic mapping exercise utilizing an advanced mapping tool to translate health concerns from SNOMED CT to ICD-10-CA and ICD-9.

Results: The Canadian Institute for Health Information is developing the pan-Canadian Primary Health Care EMR Minimum Data Set version 1.1, a focused set of EMR data elements to guide the creation of comparable primary health care EMR data for performance measurement across Canada that will support interoperability. The comprehensive PHCVS supports the requirements to capture standardized health concern data in the minimum data set and close the gap in primary care data.
The established value set will be socialized across Canadian jurisdictions to ensure that it aligns with local data collection requirements. Ongoing input from stakeholders will inform enhancements to the list, and maintenance timelines will be structured in accordance with the update cycles for SNOMED CT Canadian Edition and ICD-10-CA.

Conclusion: When implemented in point-of-care systems, the PHCVS will enable the generation of standardized and comparable, primary healthcare data. It will support performance measurement at local and national levels, aiding in clinical and health system use, and provide a clear overview of chronic disease prevalence across the healthcare system.

Modelling patient trajectories within the CIUSSS de l'Ouest-de-l'Île de Montréal (COMTL) : development of an automated tool through process mining.

Presented by: Alexandra Langford-Avelar

All Authors: *Pierre Lemay1, Juliette Duc2, 3, Delphine Bosson-Rieutort2, 3, 4, Alexandra Langford-Avelar1, 2, 3, Benjamin Dalmas2*
Author Affiliations: *1CIUSSS de l'Ouest-de-l'Île-de-Montréal, 2École de santé publique de l'Université de Montréal, 3Centre de recherche en santé publique (CReSP), 4Centre interuniversitaire de recherche en analyse des organisations*

Background and Objectives: The COMTL's Performance and Statistics department improves facility performance by generating and identifying management information. This is achieved through the dissemination of administrative health data (AHD) and indicators. Currently, each COMTL service's performance (emergency, pharmacy...) is assessed separately, lacking a comprehensive view of overall facility performance. In response to this, I suggest developing an automated tool that models patient trajectories within COMTL facilities using process mining methods applied to AHD, aiming to optimize resource allocation.

Approach: Process mining models pathways using organizational data, enhancing process control and improvement. Patient interactions with services provide data within service-specific information systems, enabling process mining to model trajectories across health facilities. However, modelling patient trajectories demands an architecture integrating data from diverse sources, posing methodological challenges in standardizing the AHD due to interoperability issues. Essential to this is the implementation of automated data transfer scripts adhering to standardization and high-quality control rules. The resultant database is converted into an "event log" to create a process map that models these trajectories, addressing the intricacies of healthcare processes.

Results: As an expected result, by applying process mining methods we are modelling and displaying the actual trajectories of patients going through all the facilities of the COMTL. Indeed, all these activities, their chronological order and the resources they required provide both an overview of the users' trajectories through the health system, but also of the organizational process around these trajectories. After thorough validation assessment, in order to both represent the reality and satisfy the need of healthcare providers, this modelling process will then be implemented within an automated tool (including data cleaning and data modelling). This tool will provide a dynamic dashboard that can be used by healthcare professionals or decision-makers to better organize care services through all the services and facilities of the COMTL.

Conclusion: Developed with COMTL, this project establishes the first automated tool for modelling and understanding processes in a CIUSSS's health facilities. By identifying bottlenecks and resource-intensive variations, this approach enables rapid service adjustments. While the development of an inter-facilities process poses methodological challenges, overcoming them will enhance research on healthcare trajectories.

Capturing the perspective of urban Inuit youth through photovoice in Winnipeg

Presented by: Josée Lavoie

All Authors*:* *Josée Lavoie1, Michael Arvaarluk Kusugak2, Steven Lui1, Grace Voisey Clark2, Jeevan Toor3, Sem Perez1, Polina Anang1, Adriana Mudryj1, Tagaak Evaluardjuk-Palmer2, Carly Zulich1, Nuqaalaq Brown2*
Author Affiliations: *1University of Manitoba, 2Isumataq Sivuliuqti, 3University College London*

Background and Objectives: Inuit youth-centric culturally safe programming is lacking, and often Inuit are excluded from health and wellness criteria as they do not fall under First Nations or the Metis. Mental health among Inuit youth is considered a public health emergency, with suicide rates among the highest worldwide. Good mental health and well-being are important factors in self-determination, hope, and quality of life.

Approach: This qualitative research utilized photovoice to engage Inuit youth and allow them to reflect on, and subsequently communicate their perspectives on their mental health protective factors and challenges living in an urban location. Photovoice is a qualitative research method that entrusts cameras to participants such that they can identify, document, and represent their perspectives of their communities. For our research, we opted for this participatory action research method as it provided more meaningful engagement of our youth participants as opposed to traditional participant-driven surveys and group interviews in a series of three workshops.

Results: Many of the factors contributing to the participants' mental wellness centered around the significance of community. The theme of community garnered the most connections, reflecting its profound impact as identified by the group. They emphasized the strong familial and social ties in their home community outside of Winnipeg, portraying them as a close-knit, collective family. One participant explained how in their smaller home communities, everyone knows each other, fostering an environment where children have the freedom to explore the community, and parents have confidence that the collective community will watch over and care for all the children, considering them part of an extended family, highlighting challenges after relocating to Winnipeg, where this profound sense of community and familial support is absent.

Conclusion: Disruption of cultural continuity, racism, and challenges forming meaningful connections in an urban environment have led to disconnection from cultural roots. This study highlights the resilience of Inuit youth, allowing participants to express their perspectives authentically, capturing the complexities of identity as they navigate between traditional values and urban living.

Person, hospital, and geographic factors associated with connection to treatment following hospital discharge for an opioid toxicity in Ontario

Presented by: Shaleesa Ledlie

All Authors: *Jes Besharah 1, Charlotte Munro1, Daniel McCormack2, Tara Gomes2, 3, 4, 5, 6, Ahmed M. Bayoumi5, 6, 7, 8, 9, Shaleesa Ledlie2, 3, 4, Tonya Campbell3, Mina Tadrous2, 4*

Author Affiliations: *1Ontario Drug Policy Research Network Lived Experience Advisory Group, Toronto, ON, 2ICES, Toronto, ON, 3Li Ka Shing Knowledge Institute, St. Michael's Hospital, Toronto, ON, 4Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, ON, 5MAP Centre for Urban Health Solutions, St. Michael's Hospital, Toronto, ON, 6Institute of Health Policy, Management and Evaluation, University of Toronto, Toronto, ON, 7Division of General Internal Medicine, St. Michael's Hospital, Toronto, ON, 8Department of Medicine, University of Toronto, Toronto, ON, 9Institute of Medical Sciences, University of Toronto, Toronto, ON*

Background and Objectives: People who use drugs report significant challenges interacting with the healthcare system, including experiences of stigma and difficulties obtaining primary care. Furthermore, although the care received during hospitalizations for opioid toxicities present opportunities for support, initiation of opioid agonist treatment (OAT) following toxicities is low. Therefore, we sought to determine factors associated with treatment initiation among people with opioid use disorder (OUD) following discharge from a hospitalization for an opioid toxicity.

Approach: We conducted a population-based cohort study of people with OUD discharged alive from hospital following an opioid toxicity between January 1, 2014, to December 31, 2021, in Ontario. We used administrative data to identify opioid toxicities over the study period. We examined person, hospital, and public health unit (PHU) factors associated with initiation of OAT and/or safer opioid supply (SOS) within 30-days of discharge. Proportional hazards frailty models were used to account for the occurrence of repeated events and the clustering of hospital and PHU-level factors. Death was considered a competing risk, with hazards ratios (HR) calculated for each factor.

Results: Overall, 13,463 individuals experienced 23,273 opioid toxicities, and were discharged from 175 hospitals across Ontario's 35 PHUs. Among these individuals (mean age=37.5), 66.4% were male. Person-level factors significantly associated with an increased hazard of OAT/SOS initiation included length of stay (days) in hospital (HR=1.27, 95% CI: 1.20-1.34), and higher number of opioid toxicities in the past year (HR=1.11, 95% CI: 1.07-1.16). People discharged from hospitals with the highest decile of treated opioid toxicities had a reduced hazard of OAT/SOS initiation (HR=0.75, 95% CI: 0.57-0.99), compared to hospitals in the lowest decile. Finally, people discharged from hospitals in PHUs with the highest decile rate of fatal opioid toxicities had an increased hazard of OAT/SOS initiation (HR=1.64, 95% CI: 1.19-2.28) compared to PHUs in the lowest decile.

Conclusion: The identification of factors associated with treatment initiation following an opioid toxicity highlights areas for improvement of care and targeted interventions in hospitals, including how people with short stays in hospital and those seeking treatment in regions with less experience managing opioid toxicities can be better connected to community-based care.

Trends in opioid toxicities among people with and without opioid use disorder and the impact of the COVID-19 pandemic in Ontario, Canada: a population-based analysis

Presented by: Shaleesa Ledlie

All Authors: *Tara Gomes1, 2, 3, 4, 5, Daniel McCormack3, Jes Besharah6, Charlotte Munro6, Ahmed M. Bayoumi 4, 5, 7, 8, 9, Clare Cheng1, Shaleesa Ledlie1, 2, 3, Mina Tadrous2, 3*
Author Affiliations: *1Li Ka Shing Knowledge Institute, St. Michael's Hospital, Toronto, ON, 2Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, ON, 3ICES, Toronto, ON, 4MAP Centre for Urban Health Solutions, St. Michael's Hospital, Toronto, ON, 5Institute of Health Policy, Management and Evaluation, University of Toronto, Toronto, ON, 6Ontario Drug Policy Research Network Lived Experience Advisory Group, Toronto, ON, 7Division of General Internal Medicine, St. Michael's Hospital, Toronto, ON, 8Department of Medicine, University of Toronto, Toronto, ON, 9Institute of Medical Sciences, University of Toronto, Toronto, ON*

Background and Objectives: Across Canada, the COVID-19 pandemic occurred amidst an ongoing drug toxicity crisis, driven by the unregulated drug supply. People diagnosed with opioid use disorder (OUD), are most frequently impacted by harms related to substance use. However, it is currently unknown if the pandemic state of emergency led to disproportionate increases in opioid toxicities among people with OUD compared to those without.

Approach: We conducted a population-based time series analysis using interventional autoregressive integrated moving average (ARIMA) models to examine the impact of the pandemic-related state of emergency (March 2020) on monthly rates of opioid toxicities between January 1, 2014, and December 31, 2021. We used administrative healthcare data housed at ICES, with non-fatal opioid toxicities identified using the National Ambulatory Care Reporting System and Discharge Abstract Database. Fatal opioid-related toxicities were identified using the Drug and Drug/Alcohol-Related Deaths database. We reported rates of opioid toxicities per 100,000 Ontario population. All analyses were stratified by people with and without OUD.

Results: Overall, we identified 80,296 opioid toxicities among 52,052 individuals. Nearly 14% of opioid toxicities were fatal, and 53.5% occurred among people with OUD. We observed a four-fold increase in monthly opioid toxicities between January 2014 (N=356; 2.6 per 100,000) and December 2021 (N=1,571; 10.5 per 100,000) which differed among people with OUD (0.8 to 7.4 per 100,000) and without OUD (1.8 to 3.1 per 100,000). Among these individuals, 60.5% were male, and 46.2% were 25-44 years old. We observed a significant ramp increase in the overall rate of opioid toxicities following the declaration of a pandemic emergency [0.2 per 100,000 (~30/month), p=0.02]. We found a similar ramp increase among people with OUD (0.2 per 100,000, p <.001), however this was non-significant among people without OUD.

Conclusion: The rate of opioid toxicities has continued to grow across Ontario, with a substantial prolonged acceleration during COVID-19. The important differences observed among people with OUD compared to those without, highlights the critical need for improved access to harm reduction programs and the continued monitoring of opioid-related harms post-pandemic.

Population-level utilization of direct-acting antiviral agents and trends in hepatitis C related hospitalizations among Ontario residents

Presented by: Shaleesa Ledlie

All Authors: *Tara Gomes1, 2, 3, 4, 5, Tony Antoniou3, 6, 7, 8, Mina Tadrous2, 3, Tianru Wang3, Shaleesa Ledlie2, 3, 6, Daniel McCormack3*

Author Affiliations: *1i Ka Shing Knowledge Institute, Unity Health, Toronto, Ontario, Canada, 2Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, Ontario, Canada, 3ICES, Toronto, Ontario, Canada, 4 MAP Centre for Urban Health Solutions, St. Michael's Hospital, Toronto, Ontario, Canada, 5Institute for Health Policy, Management, and Evaluation, University of Toronto, Toronto, Ontario, Canada, 6Li Ka Shing Knowledge Institute, Unity Health, Toronto, Ontario, Canada, 7Department of Family and Community Medicine, Unity Health, Toronto, Ontario, Canada, 8 Department of Family and Community Medicine, University of Toronto, Toronto, Ontario, Canada*

Background and Objectives: Across Canada, hepatitis C virus (HCV) represents the largest public health burden of any infectious disease. Fortunately, HCV is curable with direct-acting antivirals (DAAs). However, access to treatment was initially restricted in Ontario to individuals meeting specific thresholds of liver fibrosis, all disease-based criteria for DAA treatment for chronic HCV infection were removed in Ontario in 2017. Currently, there are no updated estimates of trends in DAA utilization and HCV-related hospitalizations across Ontario.

Approach: We conducted a population-based ecologic analysis of the quarterly number of people dispensed a DAA, and the rate of HCV-related hospitalizations between April 1, 2015, and December 31, 2022. We used administrative healthcare data housed at ICES to identify all people eligible for public drug benefits who were dispensed at least one DAA over the study period. We also identified all HCV-related hospitalizations for liver-related conditions reported as a rate per 10,000 Ontario population. All analyses were stratified by birth cohort (i.e., people born before and on/after January 1, 1976).

Results: Following their coverage by the publicly funded drug benefit program, the number of people dispensed a DAA increased almost four-fold from Q2 2015 (N=422) to Q4 2022 (N=938). This differed by birth cohort, with a 10.2% increase in DAAs dispensed among people born pre-1976 (N=403 to 444) and a 2500.0% increase among people born during/after 1976 (N=19 to 494). Over the same period, HCV-related hospitalizations decreased 56.7% (N=763 to 330; 0.55 to 0.22 per 10,000). Differences were observed by birth cohort with a 63.9% decrease among people born pre-1976 (N=656 to 237; 0.91 to 0.37 per 10,000), compared to a 13.1% decrease among people born during/after 1976 (N=107 to 93; 0.16 to 0.11 per 10,000).

Conclusion: Across Ontario, HCV-related hospitalizations have declined in parallel with expanded access to DAAs among people with HCV. Differences observed among birth cohorts highlights the impact of these treatments in reducing healthcare system burden among people born pre-1976 and reinforces the need to make this group a priority for HCV screening.

Opioid-related mortality during the COVID-19 pandemic across nine Canadian provinces and territories

Presented by: Shaleesa Ledlie

All Authors: *Tara Gomes1, 2, 3, 4, Shaleesa Ledlie1, 2, 3, Muhammad Mamdani1, 2, 4, J. Michael Paterson3, 4, David N. Juurlink3, 4, 5, Mina Tadrous2, 3*
Author Affiliations: *1Li Ka Shing Knowledge Institute, St. Michael's Hospital, Toronto, Ontario, Canada, 2Leslie Dan Faculty of Pharmacy, University of Toronto, Toronto, Ontario, Canada, 3ICES, Toronto, Ontario, Canada, 4Institute for Health Policy, Management and Evaluation, University of Toronto, Toronto, Ontario, Canada, 5Sunnybrook Research Institute, Toronto, Ontario, Canada*

Background and Objectives: The overdose crisis has continued to accelerate across Canada, with rapid increases in the rate of opioid-related harms observed following the declaration of the COVID-19 pandemic. Currently, there is a critical need to better understand the burden of opioid-related deaths in recent years and throughout the COVID-19 pandemic. Therefore, we examined trends in the burden of opioid-related mortality in Canada, overall and by age, sex, and province/territory.

Approach: We conducted a repeated cross-sectional analysis of all opioid-related deaths between January 1, 2019, and December 31, 2021, across nine Canadian provinces/territories using publicly available aggregate data. Our primary measure was the toll of opioid-related deaths, quantified by calculating the years of life lost (YLL) overall and by province/territory. We assessed the YLL separately across age and sex and reported YLL per 1,000 population. Our secondary measure was the proportion of all-cause deaths in each age group related to opioids. We used the Cochrane-Armitage Test for Trend to look for significant changes in each age group over time.

Results: Over the study period, the number of opioid-related deaths across Canada grew more than two-fold (2,991 to 6,005). The YLL due to opioid-related death nearly doubled over the three-year study period, from 124,012 to 247,777 between 2019 and 2021 (3.4 to 6.6 YLL per 1,000). The highest burden of deaths was among males (175,680 YLL), and young adults in 2021. We observed similar trends across age and sex in both the overall and stratified analyses. Across the provinces/territories, the YLL ranged substantially from 1.4 (Nova Scotia) to 15.6 (Alberta) per 1,000 at the end of the study period. Significant increases were also observed in the proportion of all-cause deaths attributable to opioid toxicities in all age groups ($p <.001$), most notably among those aged 20-39.

Conclusion: Across Canada the burden of premature opioid-related death has continued to accelerate over the past three years and throughout the COVID-19 pandemic. The disproportionate rates observed among males and younger adults highlights the critical need for the development of policies and programs targeted to these demographics.

Exploring the lived experiences of family physician-patient language discordance and perceptions of associated impacts on end-of-life care across Ontario

Presented by: Seung Heyck Lee

All Authors: *Sharon Johnston1, 2, Seung Heyck Lee1, Krystal Kehoe MacLeod1, 3, 4, Sathya Karunananthan4, 5, Peter Tanuseputro1, 3, 4, Stephanie Collin6, Claire Kendall1, Margaret Cody4, Daniel Bedard2, Maya Gibb3*
Author Affiliations: *1Faculty of Medicine, University of Ottawa, Ottawa, Ontario, Canada, 2Institute du Savoir Monfort, Ottawa, Ontario, 3Ottawa Hospital Research Institute, Ottawa, Ontario, Canada, 4Bruyere Research Institute, Ottawa, Ontario, Canada, 5Interdisciplinary School of Health Sciences, University of Ottawa, Ottawa, Ontario, Canada, 6Moncton Universite, Moncton, New Brunswick, Canada*

Background and Objectives: Different linguistic and cultural groups in primary care settings experience reduced access to healthcare services and quality of care at the end-of-life (EoL). Language and cultural discordance mean that the physician and patient do not speak the same language or are not from the same cultural background. This study explores the intersectionality of language, culture, geography, and care model in EoL care quality and access from the perspective of physicians providing palliative or EoL care.

Approach: Data through semi-structured interviews were collected from family physicians providing language-discordant EoL care to Francophone and/or Allophone older adults across different care models and geographic locations in Ontario. Participants were also surveyed for demographic information on gender, primary language, race/ethnicity, country of birth, educational background, geographic region (postal code), practice facility, among others. Reflexive thematic analysis and the Intersectionality-Based Policy Analysis (IBPA) Framework were used to report themes within the data and consider the influence of the social location of the physician, geographic considerations impacting service provision, and barriers imposed by differing funding structures on results.

Results: 16 family physicians were interviewed from various urban, suburban, and rural regions of Ontario practicing in community and hospital outpatient clinics, home-based care, and long-term care homes. Four major themes were identified 1) Communication challenges when mediated by professional and family interpreters 2) Care challenges related to developing patient-centered goals of care and providing access to timely EoL care 3) Cultural navigation especially during difficult conversations around death and understanding patient preferences 4) Ways to cope through physician interpersonal skills and suggestions for systemic resources in language/culture. Physicians practicing in community settings and following fee-for-service models were less likely to have access to professional interpreter services. Physicians in long-term care settings emphasized lack of funding to provide culturally-friendly foods and environment.

Conclusion: Cultural discordance required increased self-awareness of personal biases when providing care, whereas language discordance led to breakdown of basic communication, which posed a greater challenge to physicians. This evidence will be key to informing clinical practice guidelines and mobilizing change to improve care for linguistic minority adults at EoL.

Intention and Self-Efficacy to Quit Cigarettes and E-cigarettes among Parents and Adolescents: Baseline findings from a Pilot Randomized Controlled Trial of a Digital Screening and Brief Intervention

Presented by: Émile Diamant

All Authors: *Émile Diamant1, 2, Cristal Namuhoranye2, 3, Olivier Drouin2, 4, 5, 6, Tamara Perez2, Nicholas Chadi2, 5, 7*

Author Affiliations: *1Department of medicine, Faculty of medicine, Université de Montréal, 2Centre de recherche du CHU Sainte-Justine, 3Department of sociology, Faculty of arts and sciences, Université de Montréal, 4Department of general pediatrics, CHU Sainte-Justine, 5Department of pediatrics, Faculty of medicine, Université de Montréal, 6Department of social and preventive medicine, Université de Montréal School of Public Health, 7Department of adolescent health medicine, CHU Sainte-Justine*

Background and Objectives: Tobacco use is the single greatest preventable cause of mortality in Canada and 15% of Canadian children are exposed to household secondhand smoke. Clinical Effort Against Secondhand Smoke (CEASE) is an effective, cost-efficient intervention that systematically screens parents for tobacco use and offers direct access to evidence-based cessation services. We examined characteristics of parents and adolescents approached for an adapted version of CEASE (CanCEASE), with a focus on intention and self-efficacy towards quitting.

Approach: This study is a single-blind pilot randomized controlled trial, comparing CanCEASE to usual care. Parents of children 0-17 years old and adolescents 14-17 years old were included if they reported using cigarettes or e-cigarettes in the past 7 days. Data regarding sociodemographic characteristics, smoking and vaping consumption and well as self-efficacy and intention to quit (measured using single 10-points Likert scales) towards cessation were collected at baseline through a tablet-based survey. Wilcoxon signed-rank tests were used to compare self-efficacy and intention to quit within six months at baseline between smokers and e-cigarette users as well as between parents and adolescents.

Results: There were 74 parents and 54 adolescents reporting cigarette and/or e-cigarette use who were included in this sample. Smoking and vaping rates among participants were 78.4% and 43.2% in parents, and 38.9% and 90.7% in adolescents, respectively. Most participants (85.2%) identified as White; 44.6% of parents had no post-secondary education. More than half of parents who smoked cigarettes, and more than 40% of parents who used e-cigarettes expressed high (≥ 8/10) intention to stop. Only 12.9% of parents who used e-cigarettes reported a previous attempt to quit. Intention and self-efficacy did not differ depending on the type of consumption (e-cigarette vs tobacco). Adolescents had lower intention to quit within 6 months ($p = 0.032$ for tobacco and $p = 0.036$ for e-cigarette consumption) than parents.

Conclusion: In our study, parents had high rates of intention to quit smoking and vaping within 6 months, suggesting an important opportunity to offer cessation support in pediatric clinics. Future interventions should focus on motivating adolescents and increasing feeling of self-efficacy in both populations.

“To do so in a patient-centred way is not particularly lucrative”: The effects of Neoliberal Health Care on HIV Preventive Medication Implementation and Delivery

Presented by: Nathan Lachowsky

All Authors: *Emerich Daroya1, Darrell H. Tan2, Alex Wells3, Nathan Lachowsky3, Mark Hull4, Daniel Grace1, Jad Sinno1*

Author Affiliations: *1Dalla Lana School of Public Health, University of Toronto, Toronto, Canada, 2St. Michael’s Hospital, University of Toronto, Toronto, Canada, 3University of Victoria, Victoria, Canada, 4Department of Medicine, University of British Columbia, Vancouver, Canada*

Background and Objectives: HIV pre-exposure prophylaxis (PrEP) is a highly effective biomedical intervention used by HIV-negative people to prevent HIV acquisition. Despite increased access to and use of PrEP across Canada, several implementation barriers result in insufficient uptake, inadequate adherence, and frequent discontinuation. Our objective was to interrogate the social, political, and economic conditions that shape PrEP implementation among gay, bisexual, queer and other men who have sex with men (GBQM) in Ontario.

Approach: Six focus groups and three interviews were conducted between July-October 2021 with 20 stakeholders in Ontario (including, health care professionals, clinicians, community-based organization staff, government staff). Participants were asked about the personal, workplace, and structural factors shaping PrEP delivery strategies for GBQM in Ontario and Canada. Transcripts were analyzed using reflexive thematic analysis informed by political economy of PrEP and drawing on a critique of neoliberalism. This approach interrogated neoliberalism as: 1) governmentality - how relations between peoples, places, and things are (re)assembled into responsible and entrepreneurial subjects; and 2) policy and programme - the effects of deregulation and privatization through policy.

Results: Participants critiqued the problematic arrangements of the current health care systems in Canada. Our findings revealed two main themes describing PrEP care in Canada as it is and as it could be: 1) Barriers to achieving optimal PrEP care, and 2) pathways to improving PrEP care. Neoliberal governmentality and policies have resulted in inequitable PrEP care by establishing funding structures that prioritize profit and produces patients and providers as individual entrepreneurs and consumers. Consequently, health care disparities are compounded for marginalized peoples who lack the resources and capacity to navigate existing health care systems. Participants identified several pathways to improve the implementation of PrEP, including greater institutional and governmental supports for PrEP and health care, leveraging communities and collaboration, and moving beyond risk-based health frameworks.

Conclusion: Existing barriers to PrEP implementation are an interrelated outcome of the socio-political-economic conditions of neoliberalism. System-wide changes guided by post-neoliberal principles are needed to improve sexual/reproductive healthcare broadly. Strategies, such as the quadruple aim, must be rooted in cultural/social contexts while prioritizing justice and equity in health care for all.

Canadian parents' risk perception of cannabis consumption during the perinatal period: A patient informed survey

Presented by: Tiffany Lee

All Authors*:* *Isobel McMahon1, Tiffany Lee2, Jennifer Donnan2, Robyn Codner3, Nick Harris1*
Author Affiliations: *1Department of Psychology, Memorial University of Newfoundland and Labrador, 2School of Pharmacy, Memorial University of Newfoundland and Labrador, 3Patient partner*

Background and Objectives: Cannabis use during pregnancy and lactation may be associated with risks to the developing fetus/infant's physical, cognitive, and emotional development. Despite being one of the most frequently consumed substances among Canada's pregnant and lactating population, few studies have examined the risk perception of cannabis use in the perinatal period since its legalization in Canada. The primary objective of this study was to assess Canadian parents' risk perception of cannabis consumption during pregnancy and lactation.

Approach: We used an experimental vignette survey design guided by the principles of patient-oriented research. A national sample of current and prospective parents was recruited through Angus Reid. Seventeen vignettes, followed by Likert scale questions, examined risk perception based on five factors (i.e., perinatal stage, frequency of use, reason for use, composition, and method of consumption). Participants were randomly assigned two vignettes and associated questions and asked to compare the risk of cannabis use during pregnancy/lactation with other substances. Participant cannabis use and demographic characteristics were also collected. Data analysis included descriptive statistics and a series of ANOVAs and ANCOVAs.

Results: Our sample included 821 participants (birthing parents, n = 417; partners, n = 393; or both, n = 11) who were primarily well educated (mean 17.5 years, SD 3.1) and employed full-time (73.5%) with high (>$100,000 per year) household incomes (56.1%). More than two-thirds of participants (67.5%) had consumed cannabis in the past with fewer (39.9%) reporting use in the last 12-months. The majority of participants perceived at least a moderate level of negative impact on the fetus/infant across all domains; no differences were observed between frequency, composition, or method of consumption. Most participants indicated that cannabis consumption during pregnancy and lactation was as harmful as consuming cigarettes (~56%) or alcohol (~49%), and less harmful than unregulated substances (~63%).

Conclusion: Canadian parents in our study viewed cannabis consumption during pregnancy and lactation as harmful to the fetus/infant. Their perception of risk was not influenced by any cannabis use factors. We plan to replicate this study with a community sample, with the aim of engaging a more diverse participant group.

Going to the Source: Direct Demand Side Assessment of Pharmacy Human Resource Needs in Newfoundland and Labrador

Presented by: Tiffany Lee

All Authors*: Jennifer Collingwood1, Shawn Bugden2, Tiffany Lee2, Omar Shogan2*
Author Affiliations: *1Pharmacists' Association of Newfoundland and Labrador, 2Memorial University School of Pharmacy*

Background and Objectives: Health human resource (HHR) modelling is used to ensure the right mix of health professionals are available to provide quality care when and where it is need. However, pharmacy HHR modelling can be challenging; the majority of pharmacists work in the private sector, where vacancies are not monitored by public bodies. This project aims to assess the HR needs of pharmacy in Newfoundland and Labrador and changes in the demand for pharmacists over time.

Approach: Working collaboratively with the Pharmacists' Association of Newfoundland and Labrador (PANL), we conducted a cross-sectional study to directly assess pharmacist vacancies in NL. Data sources included: PANL's annual survey of community pharmacy sites and hospital pharmacist membership with PANL—a requirement for licensure. Community pharmacy data included: pharmacy demographic information, the number of vacant pharmacist positions at each site, and changes in pharmacist vacancies over the previous five years. Hospital pharmacy data included the total number of pharmacists registered each year. Data collection and analysis for 2023-24 is ongoing. A descriptive summary of findings from 2002-23 is presented here.

Results: In 2022-23, a known vacancy of 61 pharmacists was identified (community vacancies = 46; hospital vacancies = 15). Vacancies were reported by 36.2% of community pharmacy sites (i.e. 38 of 105) who completed the PANL survey. Of the 67 pharmacies who did not report a vacancy at the time of survey completion, 26.6% indicated having a vacant pharmacist position in the previous 12 months. Vacancies were attributed to lateral movement of pharmacists within the province (75%), retirement (14%), provincial outmigration (5%), parental leave (5%), and new career pursuits (1%). Extrapolation of these findings to all pharmacy sites in NL suggests that the number of vacant pharmacist positions is in excess of 100.

Conclusion: The findings of this project indicate a substantial need for pharmacists in NL. A shortage of 100 pharmacists can be used in HHR modelling. The current level of demand exceeds the supply of graduates from Memorial University. Targeted measures are needed to increase the recruitment and retention of pharmacists.

Community pharmacy-based blood pressure screening: A tale of two research projects

Presented by: Tiffany Lee

All Authors*: Stephanie Gysel1, Melanie King2, Stephanie Young2, Ross Tsuyuki1, Tiffany Lee2*
Author Affiliations: *1University of Alberta Faculty of Medicine and Dentistry, 2Memorial University School of Pharmacy*

Background and Objectives: Elevated blood pressure (BP) is one of the largest contributing risk factors for premature death and disability. Approximately 50% of individuals with hypertension are unaware they have the condition; therefore, highly-accessible, community-based BP screening is essential. Community pharmacists are ideally situated with the primary healthcare system to provide BP screening. We present our findings from two observational research studies examining the frequency of elevated BP among adults, whereby community pharmacies served as data collection sites.

Approach: Using a cross-sectional study design, consenting adults >/= 18 years old were enrolled. The pilot project was conducted in Newfoundland and Labrador (NL) on World Hypertension Day 2022 in 32 pharmacies. Then, in 2023 we engaged 52 pharmacies across Alberta (AB), British Columbia (BC), and NL in data collection as part of May Measurement Month. Data collection included participant demographics, medical history, and antihypertensive use. Pharmacy personnel collected three BP readings using a Hypertension Canada recommended automated device. Readings 2 and 3 were used to estimate BP, where elevated BP was defined as >/= 140/90mmHg or >/= 130/80mmHg for individuals with diabetes.

Results: In the 2022 study, 460 adults were included in the analysis; mean age was 56 years (SD 17.0), 63% were female, and 44% had a history of hypertension. Overall, 27% (123/460) of participants had elevated BP. In subgroups of interest, elevated BP was found in: 36% (72/201) of those with hypertension, 20% (51/259) of those with no history of hypertension, and 54% (43/79) of those with diabetes. In the 2023 study, 736 adults were enrolled; mean age was 52 years (SD 18.6), 66% were female, and 35% had a history of hypertension. Overall, 21% (152/736) had elevated BP. Elevated BP was found in: 35% (88/251) of those with hypertension, 13% (64/482) of those with no history of hypertension, and 52% (53/103) of those with diabetes.

Conclusion: Opportunistic screening for elevated BP is the starting point for improved BP management. The results of this project suggest that there are high rates of undetected and uncontrolled BP in the community. Community pharmacist screening of BP is one option to help address the problem; scale-up across Canada is ongoing.

Implantation en soins primaires d’un test génétique pour le dépistage du diabète MODY2

Presented by: Samuel Legeay

All Authors: *Karine Tremblay1, 2, Josianne Leblanc2, Marie-Eve Poitras3, 4, Amélie Fournier4, Vanessa Vaillancourt3, 4, Samuel Legeay3, 4, Nathalie Bettez3, 5, Luigi Bouchard6, Philippe Caron7, Catherine Savard3, 5*
Author Affiliations: *1Département de Physiologie et de Pharmacologie, Faculté de Médecine et de Sciences de la Santé, Université de Sherbrooke, Canada, 2Département de médecine de laboratoire, Centre intégré universitaire de santé et de services sociaux (CIUSSS) du Saguenay-Lac-Saint-Jean - Hôpital de Chicoutimi, Saguenay, Canada, 3Département de médecine de famille et de médecine d'urgence, faculté de médecine et de sciences de la santé, Université de Sherbrooke, Canada, 4chaire CRMUS sur les pratiques professionnelles optimales en soins primaires , 5GMF-U Chicoutimi, Centre intégré universitaire de santé et de services sociaux (CIUSSS) du Saguenay-Lac-Saint-Jean - Hôpital de Chicoutimi, Saguenay, Canada, 6Département de Biochimie et de Génomique fonctionnelle, Faculté de Médecine et des Sciences de la Santé, Université de Sherbrooke, Canada, 7Service d'endocrinologie, Centre intégré universitaire de santé et de services sociaux (CIUSSS) du Saguenay-Lac-Saint-Jean - Hôpital de Chicoutimi, Saguenay, Canada*

Background and Objectives: Le diabète MODY2 se traduit cliniquement par une légère hyperglycémie sans complications cardiovasculaires. Ce diabète ne nécessite pas de traitement pharmacologique. Souvent confondu avec les autres diabètes, l’accès en soins primaires à un test génétique pour dépister le diabète MODY2 est un enjeu majeur pour améliorer le diagnostic des patients. L’objectif de cette étude est d’évaluer l’implantation en soins primaires d’un test génétique pour le dépistage des patients atteints de diabète MODY2.

Approach: Une évaluation développementale soutenue par le modèle RE-AIM (Reach, Effectiveness, Adoption, Implementation, Maintenance) avec sources de données qualitatives et quantitatives sera effectuée. Quinze médecins de famille provenant de deux cliniques de soins primaires seront recrutés. Une formation asynchrone en ligne sur le diabète MODY2 et le test génétique, avec questionnaire pré/post, sera mise à la disposition des professionnels. Des indicateurs d'adoption et de maintien seront collectés tout au long du projet pour chaque clinique. Un questionnaire adressé à la fois aux patients et aux professionnels et des focus groupes avec les professionnels de la santé seront réalisés pour évaluer l’implantation.

Results: Les résultats présenteront les conditions d'implantation du test génétique ainsi que les effets de la formation sur l'acquisition des connaissances des professionnels de la santé. Cette étude permettra également de documenter le processus d'implantation d'un test génétique en soins primaires ainsi que les éléments essentiels devant être considérés pour un déploiement à grande échelle dans d'autres cliniques de soins primaires canadiennes.

Conclusion: L’implantation en soins primaires d’un test de dépistage du diabète MODY2 permettra d’améliorer la prise en charge des patients atteints par cette maladie. L’évaluation de l’implantation permettra d’identifier les éléments facilitant et limitant, en vue d’établir un cahier des charges pour une mise à l’échelle Provinciale.

Medico-legal risk associated with diagnostic testing.

Presented by: Karen Lemay

All Authors*: Karen Lemay1, Diane Heroux1, Gary Garber1, Qian Yang1, Anna MacIntyre1, Laura Payant1, Richard Liu1*
Author Affiliations: *1Canadian Medical Protective Association*

Background and Objectives: Diagnostic testing is an important component in patient assessment, diagnosis, and treatment and involves multiple healthcare providers and entities. Breakdowns in processes surrounding diagnostic testing can lead to patient harm and medico-legal risks for physicians. The aim of this study was to describe factors contributing to medico-legal cases associated with diagnostic testing, and to identify areas of focus for quality improvement efforts, thereby reducing medico-legal risks and improving patient safety.

Approach: We conducted retrospective analysis on data from a national repository of cases including civil legal actions and complaints to regulatory bodies, closed between 2019 and 2021. An in-house developed framework was used to identify and analyze factors contributing to medico-legal issues with diagnostic testing or test result follow-up.
Through descriptive data analysis, we examined frequently involved physician specialties, levels of healthcare related patient harm, types of diagnostic testing interventions, and patient presenting conditions. We conducted a detailed analysis of provider, team and system factors contributing to the medico-legal case, as identified by peer experts.

Results: There were 1,429 medico-legal cases that met the extraction criteria. Family medicine physicians and surgeons were the most common physician specialties involved.
Analysis identified 1,063 patients experienced healthcare-related harm. For 936 patients, peer experts were critical of the clinical care they received, and 225 patients experienced severe harm or died.
Diagnostic error occurred in 53% of cases and frequently involved breakdowns in diagnostic imaging processes to diagnose cancer. The leading factors contributing to diagnostic error included physician lack of situational awareness related to inadequate patient monitoring and follow up on test results, and deficiencies in physician clinical decision-making such as delays in the performance of a diagnostic test or intervention. Team and system factors included inadequate office procedures in managing and communicating test results.

Conclusion: Patient harm was attributed to inadequate patient monitoring, lack of follow up on diagnostic test results or delays or failures in performance of a diagnostic test or intervention. Quality improvement opportunities to create robust systems and processes surrounding diagnostic testing could enhance patient safety.

Addressing the health risks and vulnerabilities faced by pregnant people and fetuses during extreme heat events

Presented by: Caroline Li-Maloney

All Authors*: Glen P. Kenny1, Jessie K. Hamon2, Katie Wagar1, Caroline Li-Maloney1, 2*
Author Affiliations: *1University of Ottawa, 2Health Canada*

Background and Objectives: Rising global temperature and the increase in severity of extreme heat events pose a risk to the health of pregnant people and fetuses. Prolonged heat exposure increases the likelihood of maternal morbidities (e.g. preeclampsia), and fetal morbidities (e.g. pre-term birth). A rapid review of scientific literature is underway to summarize the current state of knowledge on outcomes, risk factors and evidence-based interventions that is applicable to Canadians.

Approach: The rapid review is based on epidemiological and physiological literature, and employs a narrative approach to analysis. The search strategy focuses on studies pertaining to health outcomes (maternal and fetal morbidities) resulting from prolonged (>1 day) extreme environmental heat exposure (e.g. heat waves), and excludes heat exposure from other sources (e.g. occupational heat stress). Relevant sources published since 2010 in English or French will be included in the review. A narrative summary will be produced, synthesizing key themes and patterns within the existing literature.

Results: The review will describe 1) maternal and fetal morbidities (including pregnancy outcomes) associated with prolonged heat exposure in pregnant people; 2) environmental, physiological and sociodemographic determinants that increase the risk of developing and exacerbating morbidities; 3) interventions and behaviours that effectively mitigate the effect of prolonged heat exposure, especially for vulnerable populations. The review will also highlight the morbidities, determinants, interventions likely to be relevant within the Canadian context.

Conclusion: This work is intended to provide the knowledge synthesis needed to inform future heat-health guidance for pregnant people in Canada, accounting for the country's geographic and demographic diversity. Our findings will likely interest both policymakers and the public concerned with pregnancy risks during extreme heat events.

Primary health care Registered Nurses as facilitators of healthcare access for recent immigrants in Ontario: An interpretive descriptive study

Presented by: Eugenia Ling

All Authors*:* *Olive Wahoush1, Rebecca Ganann1, Eugenia Ling1, Melissa Northwood1*
Author Affiliations: *1McMaster University*

Background and Objectives: Research has shown that recent immigrants experience unique challenges when accessing health care contributing to health inequities. Registered Nurses (RNs) working in primary health care (PHC) have the competencies and are well-positioned to facilitate healthcare access for immigrants.
This study explored how PHC-RNs in Ontario support healthcare access and address barriers among recent immigrants.

Approach: A qualitative, interpretive descriptive approach was used. Between March to August 2023, purposeful sampling was used to recruit 10 PHC-RNs practising in Toronto, Ottawa-Gatineau, Hamilton, Kitchener-Cambridge-Waterloo, and London where the majority of recent immigrants live in Ontario. Data were collected using one-to-one, semi-structured interviews informed by Levesque et al.'s (2013) Access to Health Care framework. Data were collected and analyzed concurrently using constant comparative analysis. To analyze the data, an inductive and deductive approach was applied.

Results: Findings show that PHC-RNs play instrumental roles in supporting recent immigrants in facilitating healthcare access. Notably, PHC-RNs tailored strategies to address language barriers and promote health literacy levels. To address geographical barriers, participants mapped health services and connected immigrants to transportation resources. When financial barriers existed, they coordinated low-cost health services and helped immigrants navigate affordable health services. They also supported recent immigrants in establishing their care journey in the Ontario health system by educating them on utilizing services while navigating the complexities of the system for this population.
PHC-RN roles could be optimized by enabling them to conduct needs assessments for immigrants immediately upon arrival, connecting them to appropriate health services, and delivering preventative care through outreach activities or programs in local communities.

Conclusion: PHC-RNs are key facilitators of healthcare access for recent immigrants by coordinating their care, educating, and connecting this population to services across the health system. However, there are opportunities to optimize nursing roles and more effectively utilize their scope of practice within interdisciplinary teams to promote the health of immigrants.

Enhancing Patient-Oriented Research Training: Assessing Participant Reception of an Online Course

Presented by: Alison Luke

All Authors: *Shelley Doucet1, Linda Wilhelm2, Grailing Anthonisen3, Lillian MacNeill1, Alison Luke1, Katherine Wayne1, Colleen McGavin2*
Author Affiliations: *1Centre for Research in Integrated Care, Department of Nursing and Health Sciences, UNB Saint John, 2Patient Partner, 3Canadian Primary Care Research Network*

Background and Objectives: Engaging patient partners in health research promotes greater attention to their priorities and, in turn, supports more targeted and sustainable healthcare improvements. Patient-oriented research (POR) is now widely regarded as key to improved health systems and patient outcomes. This shift toward meaningful patient involvement in health research has sparked a growing interest in the need for POR training across Canada. Unfortunately, numerous obstacles impede the provision of POR training, including geographic and time constraints.

Approach: To help surmount accessibility barriers that may hinder POR training uptake, the research team adapted CIHR's SPOR "Foundations for Patient-Oriented Research" course into a virtual format. This course was adapted in collaboration with researchers, patients, and online learning experts.
The course consists of three modules, which focus on patient-oriented research, health research methods, and teamwork skills. Course participants from various stakeholder groups, including researchers, patients, clinicians, and policy decision-makers, were recruited from across Canada to participate in the adapted course. This study examines how a diverse set of participants received the online course.

Results: Over the span of the current study, the online course was delivered across Canada. Following course delivery, feedback surveys were sent to all participants. We received responses from 78 learners and 11 facilitators. Overall, participants and facilitators were very satisfied with the course, indicating a successful adaptation from traditional to online delivery. Survey respondents were especially pleased with the course's co-learning elements, which supplied exposure to fresh perspectives and real patient voices, as well as ample opportunity for discussion. Some participants offered recommendations for minor course revisions. Future iterations of the course will reflect their suggestions to enhance accessibility via minor changes to course format (e.g., shorter live sessions), content (e.g., more concrete examples), and workload (e.g., reduced pre-work requirements).

Conclusion: Sustainable and effective healthcare depends on health research that includes active partnerships across diverse stakeholder groups. These collaborative relationships are fostered by strong POR capacity, which requires accessible training opportunities. This online course overcomes common barriers to face-to-face training and offers more widely accessible opportunities for POR capacity building.

Staff Experiences with the Implementation of Nurse Practitioner (NP) Clinics in New Brunswick, Canada

Presented by: Alison Luke

All Authors: *Shelley Doucet1, Karine Legere2, Lillian MacNeill1, Eve Justason3, Alison Luke1, Sarah Balcom1, Jennifer Splane4*
Author Affiliations: *1University of New Brunswick, 2Universite de Moncton, 3Queens University Canada, 4Dalhousie Medicine New Brunswick*

Background and Objectives: Access to primary care is a challenge across Canada. In the province of New Brunswick (NB), approximately 15% of citizens do not have a primary care provider (PCP). The Government of NB recently implemented clinics staffed by nurse practitioners (NPs) in various regions in the province. These NP-clinics aim to reduce the provincial waitlist for a PCP. This study aimed to identify barriers and facilitators to clinic implementation and operation, as perceived by NP-clinic staff.

Approach: We used a cross-sectional qualitative descriptive design to explore staff experiences with the implementation of NP-clinics in New Brunswick. Data was collected using semi-structured interviews and this data was analyzed using qualitative content analysis. Study participants included 16 current and past employees of two NP-staffed clinics in New Brunswick. These participants included nurse practitioners (NP), registered nurses (RN), licensed practical nurses (LPN), as well as administrative staff, and managerial staff. Qualitative content analysis was used to examine the interview data.

Results: Facilitators to program implementation and operation included: having experienced mentors, fostering a collaborative practice, and having a well-equipped clinic. Barriers to implementation and operation consisted of strict timelines for implementation, complex decision-making processes during clinic set-up, large and complex caseloads, limited clinic space, issues with staff recruitment and retention, and issues around role definition and scope of practice. The study participants also expressed their views of how the clinic had impacted the community by increasing access to primary care and reducing wait times at emergency departments and walk-in clinics. Finally, participants put forth their personal recommendations for future NP-clinic implementation, which included increasing the number of NP-clinics in NB and increasing connections to other health and social care providers across clinics.

Conclusion: NP clinics are increasingly being implemented across Canada to improve primary care access, particularly in areas where there are shortages of primary care providers. Findings from this study will help inform the development and implementation of other NP-clinics across NB and Canada.

Health service delivery research priorities for individuals with complex care needs in New Brunswick

Presented by: Alison Luke

All Authors: *Samantha Fowler1, Katherine Wayne2, Shelley Doucet2, Sarah Bridges1, Julia Besner2, Lillian MacNeill2, Alison Luke2*
Author Affiliations: *1Horizon Health Network, 2University of New Brunswick*

Background and Objectives: Health research in Canada is progressively moving towards engaging patients and their caregivers in projects where they can positively contribute to the improvement of health care systems and practices. One aspect of patient-oriented research (POR) focuses on identifying patient priorities for health research. Relative to their population size, patients with complex care needs (CCN) account for disproportionately high health services usage. Therefore, these patients are well-positioned to offer informed perspectives on health service gaps.

Approach: Using a cross-sectional qualitative descriptive design, we set out to explore health service delivery research priorities for two patient populations: children/youth with CCN and older adults with CCN, in New Brunswick. Due to unforeseen challenges recruiting patients with CCN on their own, we recruited caregivers of children/youth and older adults with CCN from across New Brunswick. Qualitative data was collected using semi-structured interviews and self-report surveys. Data were analyzed using qualitative content analysis.

Results: Thirty-seven caregivers of children/youth and 35 caregivers of older adults took part in the study. The top five priority areas for improving health service delivery for children/youth with CCN were: (1) accessing appropriate services and resources; (2) care continuity and coordination; (3) transitions to adult care; (4) addressing school and daycare system barriers; and (5) caregiver support. The top five priority areas for improving health service delivery for older adults with CCN were: (1) access to healthcare; (2) homecare; (3) care navigation; (4) patient-centered care; (5) and respite care.

Conclusion: This study highlights the multifaceted nature of caring for individuals with CCN in New Brunswick. Our findings provide direction for future health research projects and offer practical guidance for health system decision-makers in the effort to improve health service delivery in New Brunswick, particularly for its most vulnerable populations.

Improving the quality of the Patient Medical Home for patients: Implementing Person-Centred Quality Indicators (PC-QIs) in primary care in Alberta

Presented by: Matthew Luzentales-Simpson

All Authors*: Matthew Luzentales-Simpson1*
Author Affiliations: *1University of Calgary*

Background and Objectives: The Patient Medical Home (PMH) offers a model of person-centred care (PCC) for patients and caregivers. Implementing PCC requires continuous quality improvement using evidence-based and public-and-patient informed tools, like Person-Centred Quality Indicators (PC-QIs). PC-QIs ensure improvements in the quality of care provided under the PMH is based on patient perspectives.
We aim to study the implementation of the PC-QIs and evaluate the impact of their use in primary care settings in Alberta, over three years.

Approach: We are implementing PC-QIs in a staged approach, using an interrupted time series design, starting with academic teaching clinics, then with Primary Care Networks serving rural and remote communities. Implementation will be guided by the Quality Implementation Framework, consisting of 4 phases: (1) Initial Considerations; (2) Co-designing implementation; (3) Supporting implementation; (4) Evaluation - of implementation processes and outcomes (e.g. patient experiences, outcomes, health system utilization). PC-QIs will be integrated into quality improvement workflows of partnered clinics using patient-reported experience measure (PREM) surveys. This data will be mapped to PC-QIs to guide clinics in identifying gaps and needed improvements.

Results: As part of our “Initial Considerations” and “Co-designing” phases, we have engaged with our partners to assess sites for readiness, barriers, and facilitators to implementation. Additionally, we worked with partners to identify a validated PREM suitable for clinical use and patient participation. We have also explored processes for surveying patients, to integrate their experience data into their electronic health records, while protecting patient confidentiality.
Based on our engagement to date, potential barriers to implementation identified include clinical workflow disruptions and workload issues, confidentiality concerns, length of the PREM, and patient usage of online portals to complete the PREM. Despite this, there is high quality improvement capacity and interest among partner clinics to use PC-QIs to routinize the collection of patient experiences to improve PCC.

Conclusion: This study highlights the barriers and facilitators to implementing patient-engaged quality improvement tools in primary care settings. These findings will inform our implementation strategies to promote more effective implementation of the PC-QI and guide the ongoing efforts to improve the quality of the PMH, based on what matters to patients.

A Qualitative Analysis of the Functions of Primary Care Nurses in COVID-19 Vaccination

Presented by: Rhiannon Lyons

All Authors: *Rhiannon Lyons1, Maria Mathews1, Leslie Meredith1, Julia Lukewich2, Dana Ryan2, Emily Gard Marshall3, Lindsay Hedden4*
Author Affiliations: *1Western University, 2Memorial University of Newfoundland, 3Dalhousie University, 4Simon Fraser University*

Background and Objectives: During COVID-19, nurses performed additional roles above routine primary care roles, often resulting in trade-offs between COVID-19 related care and non-COVID-19 related care. Furthermore, vaccine hesitancy and misinformation posed new challenges to healthcare workers. Primary care nurses (PCN) had direct COVID-19 vaccination roles, thus provide valuable insight into what facilitators and barriers existed to better manage, remedy, and plan for future pandemics. We describe vaccination roles of PCN (LPN/RPNs, RNs, NPs) during the COVID-19 pandemic.

Approach: We conducted semi-structured qualitative interviews in four regions: British Columbia, Ontario, Newfoundland and Labrador, and Nova Scotia. We asked participants to describe their roles and responsibilities in the various stages of the COVID-19 pandemic, any facilitators and challenges encountered, and the possible roles that nurses could have played. We used thematic analysis and analyzed codes related to vaccination.

Results: We interviewed 76 nurses and identified four overarching themes related to COVID-19 vaccination: 1) education, 2) administering vaccines, 3) outreach, and 4) advocacy. The themes described nurses' roles with respect to patient education, addressing vaccine hesitancy, partaking in vaccination roles outside of regular primary care practice, and supporting accessibility in COVID-19 vaccination. Specific tasks related to these four themes varied by nurse type. Some COVID-19 vaccine related roles were more easily integrated into primary care, whereas others competed with routine primary care roles.

Conclusion: PCN played key roles is mass a targeted COVID-19 vaccination efforts. PCN fostered trust through existing patient-provider relationships to enhance roles and activities related to education, outreach, and advocacy in COVID-19 vaccination, while addressing vaccine hesitancy and continuing to maintain their regular primary care practice roles.

Identifying Anti-Indigenous Racism at the Point of Care

Presented by: Tammy MacLean

All Authors: *Nadia McLaren1, Christine Monague1, Tammy MacLean1, Elder Cindy White1, Lisa Richardson1, Emily Simmonds1*
Author Affiliations: *1Centre for Wise Practices in Indigenous Health, Women's College Hospital*

Background and Objectives: Substantial evidence suggests anti-Indigenous racism is a concerning problem in health systems across Canada. Racist health systems result in poor quality of care and lead to poor health outcomes for Indigenous peoples. Moreover, Inequitable care experiences and outcomes can have profound negative effects on Indigenous peoples' likelihood of accessing future care. This research aims to identify how anti-Indigenous racism 'shows up' in healthcare organizations for Indigenous peoples while seeking healthcare.

Approach: A Narrative Review was undertaken of scholarly articles focused on Indigenous peoples' experiences with hospital-based services, wherein racism was central to the study's aim. Scopus was searched for studies from Canada, United States, New Zealand, and Australia due to their similar colonial histories, and 17 articles were selected. Thematic content analysis was undertaken in NVIVO 12, and concepts of racism informed our understanding of the data. While, historically, literature on Indigenous peoples in the health field has been framed through a deficit discourse, this study exposes racism within the health system and acknowledges the strength and resilience of Indigenous peoples.

Results: The findings from this study are framed through the behaviours of health care providers, the main theme through which the data emerged. Clinician behaviours primarily comprised of interpersonal racism, including: 1) Incomplete and inappropriate assessments of Indigenous patients reporting concerning medical symptoms; 2) Failure to obtain prior, full and informed patient consent for clinical assessments and treatments provided, and without establishing clinical rapport and trust; 3) Denial of care and/or treatments requested by patients (or family members) for managing acute clinical symptoms; and 4) Medical mistakes and/or harms caused to patients and their families. Vicarious racism was also reported by Indigenous clinicians who witnessed racism against Indigenous patients and/or heard stories about anti-Indigenous racism in their clinical workplaces.

Conclusion: There is an urgent need to develop a rights-based approach to health care for Indigenous peoples across Canada, to guarantee their inalienable right to health services without discrimination. Future research concerning Indigenous peoples should adopt a strengths-based approach while keeping the advancement of Indigenous health as the central goal.

Understanding Women's College Hospital's Commitment and Capacity for Reconciliation

Presented by: Tammy MacLean

All Authors*: Tammy MacLean1, Lisa Richardson1, Elder Cindy White 1, Emily Simmonds 1, Elder Banakonda Kennedy Kish (Bell)1, Christine Monague1, Elder Diane Longboat1, Nadia McLaren1, Maxine Brown1*
Author Affiliations: *1Ganawishkadawe Centre for Wise Practices in Indigenous Health*

Background and Objectives: Anti-Indigenous racism remains a critical problem for health systems across Canada. While the Truth and Reconciliation Commission published clear Calls to Action for the health sector in 2019, implementation has been poor. Women's College Hospital (WCH) has committed to the TRC's calls through Indigenous leadership and a dedicated centre for Indigenous Health. Yet, little is known about how a hospital journeys toward Reconciliation. This study aims to explore WCH's commitment, capacity, and progress toward Reconciliation.

Approach: As Institutional Ethnography of WCH was undertaken by a non-Indigenous embedded ally researcher, under the leadership of and through collaboration with Ganawishkadawe-Centre for Wise Practices in Indigenous Health (GCWP-IH). Interviews were held across WCH (n=42) with stakeholders selected for: 1) holding an executive role; 2) having engaged or collaborated with GCWP-IH; and 3) providing a specialty care or hospital service more likely to be used by Indigenous patients. Data was collected, analyzed using constant comparative methods, and coded in NVIVO 12. Data interpretation sessions were then held with GCWP-IH members, who shared their perspectives and interpretations of the data.

Results: WCH executives demonstrated commitment with funding for Indigenous salaries, clinical space, cultural safety training for WCH leaders, and support for organizational policy change. Otherwise, commitment to Reconciliation varied widely across WCH. Key themes are grouped accordingly: 1) Developing relationships with GCWP-IH members and expressing a sense of personal accountability for Reconciliation, while being resourceful and recognizing their own limitations; 2) Understanding the importance of advancing Indigenous health, the need for trauma informed care, and the desire to do more/wanting to help but not knowing how; 3) Seeing GCWP-IH as an organizational resources that provides leaders with expertise and guidance to advance Reconciliation across WCH; 4) Perceiving Indigenous Health as not specifically relevant to their work.

Conclusion: Meaningful commitment and capacity to Reconciliation is variable across WCH, with variability likely emerging from a lack of understanding about what Reconciliation means and who is responsible for its advancement. Mandatory education should be required for leaders across WCH and accountability measures should be put in place.

Réactivité des collaborations intersectorielles en temps de pandémie

Presented by: Laila Mahmoudi

All Authors*: Nassera Touati1, Assia Iguedjtal2, Laila Mahmoudi2, Muzhgan Haydary2*
Author Affiliations: *1École Nationale d'Administration Publique, 2École de Santé Publique de l'Université de Montréal*

Background and Objectives: Les réfugiés, demandeurs d'asile et migrants sans statut ont été surexposés à la COVID-19 en raison de leur précarité de vie. Au Québec et en Ontario, les organisations communautaires et publiques se sont engagaient dans une collaboration intersectorielle pour fournir des services holistiques. Les objectifs sont d'analyser les processus d'émergence et d'implantation d'initiatives intersectorielles lors de la COVID-19 et d'identifier des leçons apprises pour une réponse pérenne à leurs besoins à Montréal, Sherbrooke et Toronto.

Approach: Cette recherche participative est co-créée avec des réfugiés, demandeurs d'asile, migrants sans statut et des organisations communautaires et publiques. Le cadre de Mirzoev et Kane sur la réactivité des systèmes de santé a guidé les quatre phases d'une étude qualitative de cas multiples. Ces phases comprenaient la compilation des initiatives intersectorielles élaborées pendant la COVID-19, l'organisation d'un atelier délibératif pour sélectionner les initiatives, des entrevues (n=80) avec des intervenants et gestionnaires et des groupes de discussion (n=80) avec la population cible. Les données ont été analysées à l'aide d'une analyse thématique. Les résultats ont été utilisés lors de forums de discussion.

Results: Nos résultats mettent en évidence que les initiatives mises en place pendant la pandémie de COVID ont été appuyées par les instances et mécanismes de concertation préexistantes à la pandémie. La COVID a agi comme un catalyseur de collaboration intersectorielle. Elle a renforcé les mécanismes de gouvernance informels, la confiance et le partage des ressources et des connaissances pour une réponse rapide aux besoins des réfugiés, des demandeurs d'asile et des migrants sans statut. L'implantation des initiatives a illustré la capacité d'adaptation et de mobilisation des organisations communautaires et publiques en temps de crise. De plus, la participation citoyenne a joué un rôle essentiel dans le renforcement de la confiance au sein de cette population, en raison de la proximité linguistique et culturelle.

Conclusion: Cette recherche éclaire les expériences des organisations communautaires et publiques dans leur capacité à fournir des services adaptés aux réfugiés, aux demandeurs d'asile et aux migrants sans statut en temps de crise sanitaire. Les résultats seront utilisés pour améliorer les services existants et informer les prochains.

The Role of the Clinician in Immune Globulin Therapy: A Rapid Scoping Review of Health System and Policy Implications

Presented by: Umair Majid

All Authors: *Quinn Grundy1, Umair Majid1, Kelly Holloway1, 2*
Author Affiliations: *1University of Toronto, 2Canadian Blood Services*

Background and Objectives: Immune globulin (Ig) is an essential therapy for treating immunodeficiencies and neuropathies. This rapid scoping review aims to synthesize current knowledge on clinicians' experiences with Ig prescription and care management, highlighting implications for health systems and policies. This presentation will discuss practice patterns, health system and care delivery challenges, and provider knowledge needs. This presentation will discuss how to optimize health service delivery for patients with immunodeficiencies and neuropathies.

Approach: Using a structured search, we executed a rapid scoping review to identify articles on clinicians' experiences, knowledge, and practices in prescribing and managing Ig therapy for immunodeficiencies and neuropathies. We included empirical primary or secondary studies without country restrictions. We searched PubMed, Embase, PsycINFO, Social Sciences Citation Index, CINAHL, and grey literature.

Results: We included 23 articles in this review. The findings are organized into five distinct themes. First, there was variability in clinicians' knowledge and awareness of Ig therapy across geographies and specialties. Second, our analysis highlighted inconsistencies in Ig therapy dosing, administration methods, and treatment duration, varying across different medical specialties and countries. Third, we examined some reasons that explain clinicians' preference for subcutaneous Ig (SCIg) over intravenous Ig (IVIg), including convenience and health system factors. Fourth, the review explored how physicians believe that joint treatment decisions are made with their patients, but patients believe that treatment decisions are primarily made by their physicians. Finally, we discussed the socio-political and economic factors driving the escalating demand for Ig, offering a broader context to clinical practices.

Conclusion: This rapid scoping review illuminates the complexities in clinicians' experiences with Ig therapy, underscoring significant implications for health systems and policy. The insights call for targeted research to inform and refine health policies to establish a more integrated, evidence-based approach to managing and prescribing Ig therapy.

Identifying Mental Health Priorities in Adult Canadians Receiving In-Centre Hemodialysis: A Patient-Oriented Approach

Presented by: Russell Malabanan

All Authors: *Kara Shick-Makaroff1, 2, Clara Bohm2, 3, Stephanie Thompson1, Russell Malabanan4, Karthik Tennankore1*
Author Affiliations: *1co-investigator, 2Project Co-Lead, 3Supervising author, 4Principal Investigator (student)*

Background and Objectives: Patients receiving facility-based hemodialysis are more likely to experience mental health concerns compared to the general population. This was exacerbated during the COVID-19 pandemic due to isolation and limited access to healthcare services. Currently, identification and assessment of mental health concerns in this population is limited and support is lacking. This study aims to identify prevalent mental health concerns and potential patient-centered strategies to better support people receiving hemodialysis.

Approach: This mixed-methods study is part of a national project that aims to address key mental health concerns in people receiving hemodialysis. Surveys will be conducted at hemodialysis centers in Edmonton, Winnipeg and Halifax. Eligible participants include adults (> 18 years old) receiving facility-based hemodialysis, their caregivers and healthcare providers working in hemodialysis (Total target n=300). Survey questions will be both open- and closed-ended and will ask about key mental health concerns, and suggested strategies to provide mental health support in hemodialysis. Project patient partners, mental health and dialysis clinicians will help develop the survey.

Results: Summative content analysis of survey responses will identify the frequency of key mental health concerns and preferred potential strategies to address these concerns. We will use descriptive quantitative analysis to compare responses by province, sex and ethnicity. Thematic qualitative inductive descriptive analysis, guided by Dis/Ability Critical Race Theory and Feminist Disability Studies, will identify themes related to experiencing mental health concerns in the setting of facility-based dialysis, and preferences for accessing and receiving mental health support. Findings will inform subsequent stages of the national project, including a prioritizing workshop and the development and implementation of mental health support strategies at select dialysis centers across Canada.

Conclusion: This study lays the foundation to understanding mental health concerns in Canadians receiving facility-based hemodialysis and the development of strategies for individualized mental health support in this population.

Bridging the gap for health promotion: exploring opportunities to facilitate data sharing and continuity of care between primary care, speciality clinics and inpatient sites

Presented by: Kimberly Manalili

All Authors: *Danica Hignell1, Kimberly Manalili2, Madison Bischoff1, James Whitworth1, Kerry McBrien3, Kamala Adhikari1, Gary Teare1*
Author Affiliations: *1Alberta Health Services, 2Alberta Health Services and University of Calgary, 3University of Calgary*

Background and Objectives: The Integrating Prevention into Connect Care for Health (IPiC-Health) study integrates Screening, Brief Intervention, and Referral (SBIR) into routine care within Alberta Health Services (AHS) for smoking, alcohol use, and physical inactivity. While patient data for SBIR is integrated into the electronic health record, primary care providers (PCPs) experience barriers to accessing this data and providing follow up. We explored opportunities to enhance data sharing and care continuity between IPiC-Health AHS sites and primary care.

Approach: A multi-method approach was used to explore opportunities to facilitate data sharing and continuity of care between IPiC-Health AHS sites implementing SBIR and PCPs in Alberta. The following approaches were undertaken:

1. Mapping the health system to identify, then engage key stakeholders involved in facilitating communication between primary care and AHS (e.g., PCPs, AHS Primary Health Care Provincial Program, IPiC-Health Patient Advisors) to identify barriers, facilitators, and strategies to sharing data and improving continuity of care.
2. Conducting a document review to understand the current state regarding the technical factors influencing data sharing between primary care and AHS.

Results: Between October 2022-December 2023, PCPs (n=8), Primary Care Network leads (n=5), provincial organizations (e.g. AHS Primary Health Care, Alberta Medical Association) (n=15), primary care researchers (n=3), and patient advisors (n=5) were engaged through meetings and a survey. Key barriers identified through engagement and document review included: technical limitations due to use of different electronic health record systems; limited time and resources for IPiC-Health sites to create documentation for PCPs, and for PCPs to follow up; data is not in a usable format to guide PCPs. Potential opportunities identified included: leveraging initiatives to improve the discharge summary for PCPs, training IPiC-Health sites to utilize specific electronic delivery tools to facilitate communication, and encouraging patients receiving SBIR to follow up with their PCP to receive ongoing support.

Conclusion: Optimizing data sharing processes between IPiC-Health sites and PCPs has important implications for the project's impact by facilitating ongoing support in the community for patients' behaviour change goals. The learning from this project provides practical considerations for data sharing between primary care and other sectors of Alberta's health system.

Evaluation of the implementation and use of an asynchronous virtual care delivery platform.

Presented by: Emily Marshall

All Authors: *Lauren Moritz1, Emily Marshall1, Michael Donahue1, Joanna Zed1, Richard Buote1, Laura Sadler1*
Author Affiliations: *1Dalhousie University*

Background and Objectives: The COVID-19 pandemic resulted in the increased acceptance and uptake of virtual care in Canada. Synchronous virtual care (e.g., telephone or video modalities) has been a valuable tool in primary care. While patients and providers have shown interest in using asynchronous modalities (e.g., messaging or email), their use is largely limited compared to synchronous modalities. This study evaluates the implementation and use of an asynchronous virtual care platform in clinics.

Approach: We conducted a mixed-methods study of two academic family medicine clinics serving approximately 5000 patients in Nova Scotia, Canada, within which an asynchronous virtual care platform had been implemented. Qualitative data were collected from interviews with family physicians, family practice nurses, and administrative staff; and compared to quantitative administrative data, including indicators of the platform's uptake and use. Critical incident narratives were elicited through semi-structured interviews, and these data were thematically analyzed. Descriptive analyses of administrative data from January to September 2021 were conducted to describe asynchronous care platform utilization over time and by patient characteristics.

Results: Most of the platform users were women (n=413) with people over the age of 50 years accounting for over 59% of users. The results were organized using a logic model. Interviewees identified inputs, such as technical support and training, and the importance of appropriate funding models to support the use of asynchronous care modalities. Identified outputs included registration and use of the platform. Various invitation modes were used, but the most successful were individual invitations sent following conversations between the patient and provider. Most interactions on the platform were resolved within a day, with a quarter resolved within 15 minutes. Short-term outcomes of using the asynchronous virtual care platform were considered across the Quadruple Aim Framework.

Conclusion: This study identifies necessary inputs to support the implementation of asynchronous virtual care and could inform policy around their use in primary care. Asynchronous virtual care has the potential to address the four quadrants of the Quadruple Aim, thereby improving the delivery of primary healthcare for patients and providers.

Impact of variation in comorbidity, sociodemographics and deprivation on Provider type-specific prescribing utilization among primary care access-impeded Nova Scotians during COVDI-19

Presented by: Emily Marshall

All Authors*: Emily Marshall1, David Stock1*
Author Affiliations: *1Department of Family Medicine, Dalhousie University*

Background and Objectives: Increased participation of nurse practitioners in primary care and expansion of prescribing roles for pharmacists have shifted routine prescribing away from physicians. We describe recent changes in prescribing utilization by provider type among Nova Scotians facing primary care provider access barriers over the COVID-19 pandemic and explore the impact of comorbidity and socioeconomic differences.

Approach: Nova Scotia's publicly administered primary care provider waitlist, the Need a Family Practice Registry (NaFPR) was linked to clinical, sociodemographic and community pharmacy dispensation data. Population-wide primary care provider access was enumerated monthly based on NaFPR status (i.e., "on" versus "off" NaFPR). Overall, and provider type-specific prescribing rates from March 2019 through March 2022 were estimated. Crude and sequentially-adjusted rate ratios were used to estimate monthly relative differences in prescribing utilization between Nova Scotians "on" and "off" the NaFPR. Count regression models were sequentially adjusted for age and sex, overall comorbidity, rurality, relative household income, and measures of socioeconomic deprivation.

Results: Pharmacist prescribing increased over study period, more so for those on NaFPR, particularly following pandemic onset. Crude differences in prescribing utilization by NaFPR status were smallest for physician providers and largest for pharmacists, and for the latter, this discrepancy grew over the study period, particularly following the onset of COVID-19. Estimated relative differences in prescribing utilization across the study period diminished overall when sequentially adjusting for potential confounders. This was most pronounced for indicators of socioeconomic deprivation among nurse practitioner prescribing.

Conclusion: Findings suggest those seeking a primary care provider use moderately more prescribing services. Lower physician prescribing rates for this group following the pandemic coincided with increased pharmacist prescribing, particularly following the onset of COVID-19. Socioeconomic deprivation may explain discrepancies in prescribing utilization across primary care provider access.

Are practice patterns among women family physicians affected by motherhood? A matched cohort study in Ontario, Canada

Presented by: Courtney Maskerine

All Authors*: Rinku Sutradhar1, Peter Tanuseputro2, Nancy Baxter3, 4, Andrea Simpson4, 5, Maya Gibb6, Daniel Myran6, Colleen Webber6, Courtney Maskerine6*
Author Affiliations: *1ICES, 2Bruyere Research Institute, 3University of Melbourne, 4University of Toronto, 5St. Michael's Hospital, 6The Ottawa Hospital Research Institute*

Background and Objectives: Women physicians represent over half the primary care workforce, many of whom have children during their medical training and early careers. Physician mothers face challenges in their careers such as performing most family building tasks and discrimination for leaves of absence. Choices surrounding motherhood may vary based on personal and cultural background. The objective of this study is to determine the characteristics of family physician mothers, and the impact of motherhood on their clinical practice.

Approach: This is a matched cohort study examined with a difference-in-differences framework that utilizes routinely collected population-based data held at ICES. Family physicians are identified through registration data from the College of Physicians and Surgeons of Ontario (CPSO) between 1990-2018. The ICES-derived MOMBABY database links inpatient records of mothers and their newborns in Ontario, identifying all eligible pregnancies of female family physicians. Practice characteristics are obtained from the OHIP and ICES Physicians database (IPDB). Physician mothers will be hard matched based on years in practice to non-parent physicians with outcomes examined over distinct time periods post-partum and prior to delivery.

Results: Analyses for this study are currently underway. Descriptive analyses of family physicians who are mothers include years in practice and age at first delivery, number and age of children, medical training characteristics, personal health status (such as medical comorbidities), languages spoken, immigration status and neighbourhood of origin. Primary outcomes of interest include the number of days worked per year, patient volume, percentage of after-hours billing, practice setting, and comprehensiveness of family practice. Multivariable regression analyses will be used to assess the relationship between family building and practice patterns among women family physicians. Subsequent analyses will specifically focus on sociodemographic factors such as linguistic background and immigration status, as well as career stage at first delivery, on practice patterns.

Conclusion: This study will leverage health administrative data to generate knowledge of practice patterns among women physicians experiencing motherhood, from diverse backgrounds and across training stages. This information is vital to support and retain women in the primary care workforce.

Nurses leading the way: A qualitative study of nursing leadership, innovation, and opportunity in primary care during the COVID-19 pandemic

Presented by: Maria Mathews

All Authors: *Shabnam Asghari1, Ruth Martin-Misener2, Samina Idrees3, Lindsay Hedden4, Dana Ryan3, Jamie Wickett3, Jill Bruneau1, Cheryl Cusack5, Gillian Young3, Maria Mathews3, Crystal Vaughan1, Sarah Spencer4, Julia Lukewich1, Leslie Meredith3, Emily Gard Marshall*
Author Affiliations: *1Memorial University, 2Dalhousie University, 3Western University, 4Simon Fraser University, 5University of Manitoba*

Background and Objectives: Nursing leadership contributes to improved health outcomes and access to care; however, the role of the nurse as a leader is often underutilized and formalized opportunities for nurses to actualize leadership in primary care are lacking. During the COVID-19 pandemic, nursing leadership was also not well-incorporated into pandemic response plans. We explored nursing leadership during the pandemic, factors impacting leadership enactment, and perceptions surrounding the need for nursing leadership in primary care.

Approach: We conducted semi-structured qualitative interviews with nurse practitioners, registered nurses, and licensed/registered practical nurses across regions in four Canadian provinces (British Columbia, Ontario, Nova Scotia, Newfoundland and Labrador). We used maximum variation sampling to recruit participants across a range of characteristics (e.g., community size, practice models, etc.). During the interviews, we asked nurses to describe the roles they carried out during different pandemic stages, facilitators/barriers they experienced, and potential roles nurses could have filled. Interviews were transcribed verbatim and a thematic analysis approach was employed. To explore the topic of leadership, codes relevant to this theme were identified and analyzed.

Results: We interviewed a total of 76 nurses and identified three overarching themes related to nursing leadership: 1) stepping up: actualizing leadership; 2) leveraging existing leadership; and 3) the value of nursing leadership. Nurses described performing a range of leadership activities, including educating team members, engaging in community outreach, developing policies, and disseminating information. Nurses demonstrated leadership competencies through effective problem-solving and developed innovative strategies to improve care delivery, particularly in response to gaps in the communication of pandemic policies/guidelines. Nurses in existing leadership positions and those with leadership skill sets were well-positioned to take on key roles in the pandemic response. Participants expressed the value of nursing leadership in primary care, as well as a desire for increased recognition, visibility, and greater involvement in decision-making.

Conclusion: Findings emphasize the need for health administrators and decision-makers to recognize and involve nurses during health care crises, specifically with respect to resource allocation and workforce management. By leveraging nursing leadership, many health system challenges can be addressed and a more robust and timely pandemic response can be coordinated.

Riel and Resilient: the impact of climate change on Red River Métis health

Presented by: Kemunto Matini

All Authors: *Wajihah Mughal1, Kemunto Matini2, Olena Kloss3, Tetiana Shcholok4, Frances Chartrand5*
Author Affiliations: *1wajihah.mughal@mmf.mb.ca, 2kemunto.matini@mmf.mb.ca, 3olena.kloss@mmf.mb.ca, 4tetiana.shcholok@mmf.mb.ca, 5fchartrand@mmf.mb.ca*

Background and Objectives: Ramifications of climate change encompass a spectrum of challenges, from natural disasters to amplification of air and waterborne infections, and the erosion of land-based cultural practices of Indigenous communities, including the Red River Métis. Notably, there is limited knowledge exploring the Red River Métis perceptions concerning climate change and its impacts on their health.

Approach: The study utilized a cross-sectional survey encompassing demographic information, open-ended queries, and Likert-scale questions. The survey explored participants' perspectives on climate change, the environmental impact on health and infectious diseases, and actions needed to address environmental health risks. Thematic analysis was conducted on the open-ended questions while percentages were computed for the quantitative data and demographic information.

Results: A total of 144 Red River Métis Citizens aged between 16 and 75+ years (with a mean age of 63), participated in the survey. Participants identified as female (78.5%), male (20.1%), and non-binary (0.70%). A majority (88%) considered the environment to be extremely important to their health and well-being. Concerns expressed by participants include apprehension about climate change, pollution, alterations in wildlife patterns, and accessibility to green spaces. Participants highlighted the effects of environmental shifts on infectious diseases. Proposals for interventions encompassed environmental policies targeting industrial pollution, improvements in urban sanitation, and encouragement of low-risk behaviors to mitigate the spread of infections.

Conclusion: Red River Métis Citizens perceived climate change and environmental issues as pivotal factors affecting their health. Mitigating the repercussions of environmental fluctuations and health risks associated with climate change necessitates a coordinated approach, requiring policy and program initiatives orchestrated by the Manitoba Métis Federation with local and provincial authorities.

Engaging Community Immunity: the COVID-19 Impact and Post-Pandemic Strategies for Red River Métis

Presented by: Kemunto Matini

All Authors: *Ayodeji Falade1, Olena Kloss2, Frances Chartrand3, Wajihah Mughal4*
Author Affiliations: *1ayodeji.falade@mmf.mb.ca, 2olena.kloss@mmf.mb.ca, 3fchartrand@mmf.mb.ca, 4wajihah.mughal@mmf.mb.ca*

Background and Objectives: The rollout of COVID-19 vaccines during the provincial pandemic response has been reportedly marked with inequalities among various groups, particularly the Red River Métis in Manitoba. While vaccination remains a pivotal role in preventing transmission, there remains a scarcity of studies focusing on Red River Métis in the landscape of COVID-19 research in Canada.

Approach: A cross-sectional approach employed a self-administered survey to assess participants' socio-demographic characteristics, COVID-19 vaccination status, infection rate, and level of acceptance of seasonal COVID-19 vaccine boosters. Collected data were analyzed using descriptive statistics.

Results: The study revealed a high vaccination rate of 99.30% among respondents (n=144). A majority (62%, n=89) of respondents received up to 3 doses of COVID-19 vaccines, 22% (n=31) received 4 doses while 16% (n=23) received 2 doses. About 49% (n=65) of respondents had tested positive for COVID-19, 46% (n=60) had never tested positive for COVID-19, 4% (n=5) did not know their testing status while 1% (n=1) did not disclose. However, 90% of respondents (n=53) tested positive post-vaccination while 10% (n=6) tested positive pre-vaccination. Most of the respondents (80%, n=110) were willing to receive a seasonal COVID-19 vaccine booster. Thematic analysis of Citizens' concerns revealed four overarching themes: the need for a COVID-19 helpline and post-pandemic care, COVID-19 testing as a work requirement and inadequate staffing.

Conclusion: Despite the high vaccination rate, multiple doses of COVID-19 vaccines appeared insufficient in providing maximum protection. Therefore, a post-pandemic strategy should address the uptake of seasonal COVID-19 vaccine boosters and prioritization of future studies on vaccine effectiveness.

Exploring the ongoing impact of COVID-19 and other seasonal respiratory illnesses on direct support workers for people with intellectual and developmental disabilities in Manitoba

Presented by: Mahnoosh Matlabi Lotfabadi

All Authors: *Shahin Shooshtari1, Javier Mignone1, Mahnoosh Matlabi Lotfabadi1, Christine Kelly1*
Author Affiliations: *1Department of Community Health Sciences, University of Manitoba, Canada*

Background and Objectives: COVID-19 and other seasonal respiratory illnesses (SIRs) create significant challenges for healthcare delivery. Most research and media attention focuses on older adults residing in long-term residential care facilities with little knowledge about the experiences of direct support workers (DSWs) of persons with intellectual and developmental disabilities (IDD). The study will 1) explore the impact of COVID-19 and SIRs on DSWs and their supervisors and 2) identify successful strategies to overcome the challenges experienced.

Approach: A cross-sectional online survey with open and closed-ended questions will be sent to 100+ community agencies supporting persons with IDD across Manitoba. The number of DSWs at agencies varies greatly. The expected response rate is 25%. The survey will be developed based on literature review and input from experts. It will be pilot tested. Descriptive statistics will be used to describe the study participants. Bivariate and multiple regression modelling will be used to determine characteristics that are associated with health and well-being of DSWs. Content analysis of responses to the open-ended questions will be used to address the second objective.

Results: The study findings will provide insights into policies and guidelines implemented during a specific public health crisis that affected the mental, social, and physical well-being of direct support workers (DSWs) and their supervisors caring for individuals with IDD. Moreover, the study findings will help explain the associations between sociodemographic characteristics (age, sex, level of education, immigration status), work-related characteristics (years of service), and the mental, social, and physical well-being of DSWs and supervisors. Successful actions taken by DSWs and their supervisors to address challenges during the COVID-19 pandemic and seasonal respiratory illnesses will be identified. These effective approaches will be shared with others to contribute to capacity building in supporting individuals with IDD during the crisis.

Conclusion: Findings will inform the development of inclusive policies and plans for DSWs caring for persons with IDD and their supervisors. Findings on successful actions taken to address challenges during the COVID-19 pandemic and seasonal respiratory illnesses will enable policymakers to plan best practices interventions in advance of future crises.

Icanbewell/Choixsante: The Innovative Digital App for Equitable Primary Care

Presented by: Cleo Mavriplis

All Authors*: Cleo Mavriplis 1, 2*
Author Affiliations: *1University of Ottawa Department of Family Medicine, 2Assistant Professor*

Background and Objectives: With hospital emergency departments overwhelmed and Canadians feeling frustrated by a lack of primary care access, our free bilingual webapp www.icanbewell,ca (ou www.choixsante.ca) provides trusted information about preventive health care to empower the public to take control of their health. Our goal: Reimagine the use of healthcare resources by providing one digital bilingual resource that will empower the public to access evidence-based tools to maintain well-being, with attention to Indigenous and other underserved populations.

Approach: The app currently provides personalized preventive health advice for adults of all genders and ages. Further goals are:

1. Increase uptake of the icanbewell app across Canada by using a large media campaign.
2. Design an expansion of the app, with collaboration from indigenous patient and community partners, to include useful content and resources for indigenous groups.
3. Expand the app to include resources for members of the public with no access to a primary care provider.
4. Assess the impact of the app with electronic surveys on the app and interviews with selected groups of the public.

Results: In 2019 a mixed methods acceptability and usability study done during the beta testing of the app, with providers and the public, provided the following feedback: 1) the app functioned well-electronically; 2) the public welcomed a more reliable source of Canadian health information than “Dr Google”; 3) the public often used American websites and were not aware of the existence of Canadian resources on the web; and 4) health care providers found it useful to have a repository of up-to-date preventive health care guidelines and ordered less tests after consulting the app. We are currently expanding the content and target use of the app as described above under “Approach”. The results of this expansion will be reported at the conference.

Conclusion: Our society is living a health care crisis and digital innovation can provide help. We propose “An App to Fill a Gap”, with increased attention to marginalized groups in society, who stand to benefit from increased empowerment and resources.

Preferences for In-Person Mental Health Care Over Virtual Care in Youth

Presented by: Raegan Mazurka

All Authors: *Barbara Pavlova1, 2, Jill Cumby2, Raegan Mazurka1, 2, Ross Langley1, Kathryn Freeman1, Briana Ross2, Maureen L Brennan3, Samuel E Hickcox4, Lukas Propper1, 3, Cynthia Howard2, Rudolf Uher1, 2, Alexa L Bagnell1, 3, Dara Liu2, Emily Howes Vallis1, 2, Lucy*

Author Affiliations: *1Dalhousie University, 2Nova Scotia Health, 3IWK Health Centre, 4Office of Addictions and Mental Health, Government of Nova Scotia*

Background and Objectives: Although virtual mental health care may improve access to care, experts caution that privacy and technology barriers could perpetuate access inequities. Further, an important question for the success of virtual care is whether it aligns with youth preferences. In the current study, we quantified preferences for and barriers to virtual versus in-person mental health care in youth, including in vulnerable segments of the population such as families with a parent with severe mental illness (SMI).

Approach: Participants were 219 youth from the Families Overcoming Risks and Building Opportunities for Wellbeing (FORBOW) cohort, of which 133 (61%) youth had at least one parent with SMI. Participants were interviewed about their healthcare preferences and access to technology/privacy between October 2021 and December 2022. SMI diagnoses were captured from yearly FORBOW assessments.

Results: Overall, we found youth preferred in-person mental health care (strong [46%] or somewhat [21%] preference) over virtual care (4% and 9% strong or somewhat preferences, respectively) or stated no preference (20%). Youth with a parent with severe mental illness were more likely to report a strong in-person preference than care than youth without a parent with SMI (73% vs. 57%). Reasons given for in-person preference included better connection with the provider, discomfort with telephone/video calling, and concerns about privacy. Nearly half of youth reported lack of private space to hold a video call (46%).

Conclusion: A majority of youth prefer in-person mental health care over virtual care, with privacy being a common barrier to virtual care. A flexible, blended approach that adds virtual options to in-person delivery may be most aligned with preferences and least likely to disadvantage vulnerable groups.

Impact of primary care physician payment models on quality and economic outcomes: a systematic review

Presented by: Kerry McBrien

All Authors: *Sepideh Souri1, Rachelle Drummond1, Braden Manns1, Amity Quinn1, Kerry McBrien2, Brenlea Farkas1, Anderson Chuck2, Melanie Columbus1*
Author Affiliations: *1University of Calgary, 2Alberta Health Services*

Background and Objectives: Primary care physician payment models are a topic of interest among policy makers around the world. The purpose of this study was to perform a systematic review of studies comparing one or more primary care payment models, to understand the impact of payment models on patient-related and healthcare system-related outcomes.

Approach: We searched MEDLINE, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects, NHS Economic Evaluation Database, EconLit, Web of Science, and Embase from inception to July 2023. We included studies that compared primary care physician payment models (e.g., fee-for-service (FFS), capitation, salary) for any patient population. We excluded studies that considered pay for performance schemes alone. Relevant study designs included interrupted time series, controlled before and after, or randomized or non-randomized controlled trials. Outcomes of interest included access to care, clinical outcomes, cost, patient satisfaction, system utilization, and quality of care.

Results: We screened 38,315 abstracts and included 13 publications reporting on nine interventions. Studies were published between 1992 and 2021; five were done in the US, two in Canada, two in China and one in Denmark. The comparator payment model was FFS in all but one study. Intervention payment models included capitation or mixed capitation (n=8), enhanced FFS (n=2), and salary (n=1). Service utilization was the most frequently reported outcome (n=9), followed by quality of care (n=5), cost (n=5), and access (n=2). Patient satisfaction/experience was reported in two studies, while clinical outcomes were not reported in any. While non-FFS payment models tended to be associated with lower primary care utilization, effects on other outcomes were inconsistent. Given the heterogeneity across studies, a meta-analysis is not feasible.

Conclusion: Findings are preliminary and we are unable to make definitive conclusions or recommendations at this time. We anticipate our review will contribute to knowledge around primary care physician payment models, guiding direction of future studies, and informing policy decisions.

Evaluating the Implementation of Measurement-Based Care in Child and Adolescent Mental Health Services

Presented by: Erin McCabe

All Authors: *Jennifer Zwicker1, Michele Dyson2, Erin McCabe1, Ryan Clements2, Bishnu Bajgain3, Maria Santana4, Iliana Ortega3, Paul Arnold3, Bonita HW Ma3, Deborah McNeil2*
Author Affiliations: *1School of Public Policy, University of Calgary, 2Alberta Health Services, 3Department of Pediatrics, University of Calgary, 4Community Health Sciences*

Background and Objectives: The routine use of patient-reported outcome measures (PROMs) to direct treatment planning in mental health care has been shown to improve client experiences and outcomes. PROMs were implemented into clinical care across all services of a new pediatric mental health centre (The Summit) in Calgary, Alberta. We undertook a formative evaluation to assess progress and identify barriers and facilitators to the implementation of PROMs at the Summit.

Approach: This study is a mixed-methods evaluation using the Consolidated Framework for Implementation Research (CFIR). Participants include patients and caregivers, Summit leadership, staff and the implementation team at The Summit. We used surveys, focus groups and semi-structured interviews, as well as data from the clinical PROMs database and utilization data from the electronic medical record system. We used a deductive, directed content analysis approach, guided by CFIR, to analyze qualitative data. Penetration was assessed by calculating the absolute number and proportion of patients and caregivers filling out PROMs at planned time points.

Results: This project is in progress. Youth (n=17), caregivers (n=75) and clinical staff (n=30) participated in surveys. We held two focus groups with clinical staff (n=25). Preliminary barriers identified include technological issues and staffing resources. Facilitators include the acceptability of the PROMs (PedsQL, Revised Children's Anxiety and Depression Scale) by youth, caregivers and clinicians, and the relative priority of PROMs within the Summit. Interviews with youth and caregivers, leaders and the implementation team are in progress. We will report penetration and the key factors affecting the successful implementation of PROMs at The Summit.

Conclusion: To our knowledge, this is the first study of the implementation of PROMs in pediatric mental health services, and our findings can highlight successful strategies to inform future implementation efforts in similar settings.

The collection of race and ethnicity data for use in biobanks

Presented by: Milca Meconnen

All Authors: *Milca Meconnen1*
Author Affiliations: *1McGill University*

Background and Objectives: In health research studies, race and ethnicity are two variables commonly used to capture the lived experiences of participants, helping us better understand health disparities observed. Collecting this data for biobanking presents a unique set of challenges, as biobanks are often long-term, dynamic projects associated with both current and future research endeavours. We proposed a set of considerations for the collection and use of race and ethnicity data in the context of biobanking.

Approach: Race and ethnicity were first defined and differentiated, using guidance documents from national data agencies and examples from contemporary clinical research. We focused on studies involving race and ethnicity data in the context of COVID-19 research, given the widely noted inequities in COVID-19 risk and outcomes experienced by minority populations. Commonly used data collection methods were also explored, including comparisons of the advantages and disadvantages of self-identification, administrative identification, and genetic ancestry estimates. Finally, the collection of data for primary use was compared to the collection of data for secondary use.

Results: Race and ethnicity are socially constructed systems for categorizing populations, not informed by genetic or biological factors. When included as a part of a biobank's data, they are often used to approximate more difficult-to-measure concepts, such as access to health services or systemic discrimination. When collecting race and ethnicity data for primary use, we must consider the overall study objective and specific research questions. This allows us to differentiate between race and ethnicity and apply the appropriate concept, especially in basic science research where samples are often analyzed without considerations for participants' lived experiences. When data are being collected for secondary use, researchers should prioritize feasible data collection and determine how to categorize the data uniformly, according to a method outlined by a suitable organization.

Conclusion: In collecting race and ethnicity data for biobanking, researchers should clearly state their intentions for data collection, thoroughly describe how individuals were categorized, and be critical and contextual in their interpretations of the data.

Generating A Portable Policy Framework for Digital Health Equity in Canada

Presented by: Sumaya Mehelay

All Authors: *Simone Shahid1, Janine Badr2, Sumaya Mehelay1, James Shaw1, 3*
Author Affiliations: *1Women's College Hospital, 2University of Montreal, 3University of Toronto*

Background and Objectives: A large body of literature has documented the ways digital health technologies have both enhanced access to care and exacerbated health inequities for patients. As Canada's plans for healthcare become increasingly reliant on digital health technologies, strategies to address these inequities will be essential. This project aims to identify immediate opportunities for policy change to create a process-oriented, evidence-based portable policy framework that ensures inclusive high-quality digital healthcare for all.

Approach: We use an Intersectionality Based Policy Analysis (IBPA) approach, informed by Hankivsky et al (2014), to guide the study. This approach explicitly recognizes intersectional determinants of health and outlines a series of guiding questions to enable the team to produce clear descriptions of the policy problem and understand how existing policy structures must be transformed to produce policy environments that explicitly promote health equity. Data was collected using semi-structured qualitative interviews (n= 28) with policymakers and community leaders from Alberta, Saskatchewan, Ontario, and Quebec, who have an interest in digital health.

Results: Participants identified foundational elements that must be present in order for equitable virtual care to be possible, including access to high-speed internet and digital devices, digital literacy skills, and ongoing support mechanisms for users. To integrate these components into the existing digital healthcare system, several strategic policy ideas have been proposed, such as infrastructural investments, collecting outcome measurements, establishing accountability mechanisms, and developing standards around digital healthcare delivery. However, participants outlined several potential hurdles, including the constraints imposed by short-term funding cycles, the pressing demands for financial investments, a wide variety of ideas about equity, intricate levels and domains of policy involvement, issues related to data poverty and sharing, and the overarching concern about the trustworthiness of technology.

Conclusion: As digital health advances in Canada, urgent action is needed to promote equitable care for everyone. This study highlights opportunities for policy change to ensure inclusive high-quality digital healthcare. Embracing community-specific, community-engaged, and relationship-based approaches will be imperative in guiding digital health equity efforts and overcoming policy challenges.

Towards an embedded health technology assessment program in Alberta: Proposed methods for a scoping review and jurisdictional scan

Presented by: Wade Michaelchuk

All Authors: *Lesley Soril1, 2, Michael Stickland1, 2, Wade Michaelchuk1, 2*
Author Affiliations: *1Department of Medicine, University of Alberta, Canada, 2Medicine Strategic Clinical Network, Alberta Health Services, Canada*

Background and Objectives: The Canadian landscape of health technology assessment (HTA) is broad, ranging from national HTA bodies to hospital-based evidence support programs. While larger HTA bodies (e.g., the CDA) are well-understood in terms of structure, processes, and deliverables, features of smaller, embedded HTA programs (i.e., within a hospital or healthcare organization) are less characterized. The objective of this work is to identify and synthesize the scope, characteristics, best practices, and operational impacts of embedded HTA programs.

Approach: Embedded HTA programs are defined here as programs developed and operating within a hospital or healthcare delivery organization. A scoping review will identify the characteristics (e.g., processes and deliverables) and operational impacts of embedded HTA programs in published literature. A jurisdictional scan will explore grey literature to identify embedded HTA programs in non-academic databases. While adhering to PRISMA guidelines for scoping reviews, we will search relevant databases from 2014 to present. Study and program data will be extracted. Thematic analysis (deductive approach) will identify facilitators and barriers for embedded HTA programs and be mapped to strategies to overcome barriers.

Results: We anticipate identifying the key features, processes, and best practices for embedded HTA programs and provide suggestions for overcoming common barriers to project prioritization, uptake, assessment, and translation to decision making. We will also summarize the impact of existing programs. The findings of this proposed work will be used to develop a conceptual framework for an embedded HTA program exclusively for medicine services in Alberta. The search strategy, created collaboratively with a research librarian, has been developed and we expect data extraction and synthesis to conclude by April 2024. In alignment with an integrated knowledge translation approach, the results of this research will be used to inform future research, where we will connect with key stakeholders to iterate on and improve the conceptual framework.

Conclusion: The proposed research will move toward addressing the critical gap in operations-focused HTA programming for medicine services and populations within Alberta. This work will contribute to evidence-informed decision-making and drive high impact innovation into care, with the ultimate goal of improving patient outcomes and enhancing health system efficiency.

Balancing the Scales: A Literature Review on Boundary Management in the Relationships between Family Physicians and Patients within Canadian Family Health Teams

Presented by: Elmira Mirbahaeddin

All Authors: *ELMIRA MIRBAHAEDDIN1*
Author Affiliations: *1Telfer School of Management, University of Ottawa*

Background and Objectives: This study probes the under-researched boundary management dynamics between family physicians and patients within Canadian Family Health Teams (FHTs). It addresses the gap concerning how physicians balance professional and personal boundaries, a crucial aspect for maintaining therapeutic relationships, patient satisfaction, and physician wellbeing.
Aimed at synthesizing these boundary dynamics, the research explores challenges in maintaining these boundaries, their impact on physician-patient relationships and healthcare delivery. Further, influence of team, organizational, and socio-cultural factors are conceptualized.

Approach: Adopting a narrative literature review approach, thematic analysis is conducted and further developed through an interpretive synthesis of the literature considering the conceptual and theoretical frameworks. Data sources include, first, peer-reviewed journal articles derived from academic databases and healthcare policy documents. The review is structured to first outline the boundary issues and boundary management tactics and then synthesize the role of FHTs, and organizational and cultural contexts.

Results: The synthesis of the findings is in progress. They are expected to offer valuable insights for healthcare professionals, informing the development of guidelines and training programs aimed at enhancing boundary management strategies. Furthermore, the study will offer recommendations for policymaking, emphasizing the need for supportive structures that uphold the integrity of professional boundaries while fostering strong, empathetic, and effective physician-patient relationships. Additionally, the findings could inform practice by recommendations toward the evolution of healthcare culture, promoting an environment where respect for professional boundaries coexists with a deep understanding of the patient's perspective, ultimately enhancing the quality and humanity of healthcare delivery within Family Health Teams in Canada.

Conclusion: This research contributes to policy, practice, and the existing body of knowledge, providing a consolidated view of the complex issues surrounding boundary management in FHTs. The findings inform about promoting FHTs that recognize professional boundaries while being responsive to the needs and well-being of both patients and physicians.

A National Standard for Cyber Resiliency in Healthcare

Presented by: Jonathan Mitchell

All Authors: *Claire Samuelson1, Siri Chunduri1, Darryl Kingston2, Jonathan Mitchell1*
Author Affiliations: *1HealthCareCAN, 2Digital Governance Council*

Background and Objectives: While digital health makes health systems more efficient and sustainable, enabling them to deliver high quality, affordable and equitable care, the digital transformation of healthcare has presented several challenges for patients, clinicians, technology developers, policymakers, and administrators and exposure to cyber threats is a growing concern.
This presentation will overview a three-year national project by HealthCareCAN and Digital Governance Council (DGC) to develop a national standard for cybersecurity in healthcare.

Approach: The lack of clear standards has been recognized as a key barrier to achieving cyber resilience in health organizations across all sectors in Canada.
The project to develop a national standard began in 2022 with HealthCareCAN and the DGC co-hosting a series of focus groups in English and French with the goal of acquiring feedback from healthcare and health technology leaders on their concerns, issues and needs around cyber security in healthcare. The standard was developed with the guidance from the workshops and the expertise of a Technical Committee and an Expert Drafting Team of cybersecurity experts.

Results: Improved cybersecurity within the health sector will enhance patient safety and better ensure that critical infrastructure, such as medical devices, are safeguarded. In an age of increasing reliance on digital systems, healthcare organizations must maintain a high level of confidence in their ability to respond to cyber threats. With support from Public Safety Canada's Cyber Security Cooperation Program, HealthCareCAN and the DGC have developed a new national standard to support cyber resilience in Canada's healthcare system. A clear framework and enhanced cybersecurity capabilities will better protect Canada's healthcare organizations from cybercrime, evolving threats, and defend critical infrastructure. Key areas of focus for the standard are prevention strategies, education, technology controls, cyber incident response planning and protocols, contingency planning, monitoring and measurement.

Conclusion: Development milestones, key findings, lessons for healthcare leaders and knowledge translation activities related to of the national standard for cyber resiliency in healthcare will be shared. Leaders will benefit from practical solutions, templates, and guidance to enhance cyber resiliency and improve patient safety within their organizations.

Pathways to Accessible Employment for Youth with Disabilities in Quebec

Presented by: Mehrnoosh Movahed

All Authors: *Jinan Zeidan1, Linda Nguyen1, Mehrnoosh Movahed1, Roberta Cardoso1, Keiko Shikako1, Ebrahim Mahmoudi Kojidi1*
Author Affiliations: *1McGill University*

Background and Objectives: Economic stability is a key social determinant of health, with employment being central to maintaining it. Consequently, the employment of persons with disabilities is a significant concern for public health. In Canada, systemic barriers contribute to a lower employment rate of 49% for this group compared to 79% for those without disabilities. In Quebec, this rate drops to 40%. This project aims to identify evidence on employment accessibility for youth with disabilities in Quebec province.

Approach: Environmental scan of Quebec policies and programs (best practices recommendations, programs, national strategies, action plans, policies, guidelines, and regulations) and a rapid review of research articles about practices/programs or research projects about accessible youth employment conducted in primarily in Quebec.

Results: Twenty documents including Quebec provincial strategy, action plans, and employment programs included vocational training programs and subsides, disability-specific programs, and financial supports for organizations favoring employment of youth with disabilities. Nine research articles about the employment of youth with disabilities in QC identified policies and programs focusing on employment for autistic youth, pre-work training programs, and policies proposing connections between the education and health systems to initiate employment opportunities and training in close collaboration between education, health, and community sectors.

Conclusion: Various programs support the employment of youth with disabilities. Focusing on community inclusion and building capacity have promising outcomes. The results can inform health and social policy development, raise awareness for families and youth about their rights, and highlight opportunities for practitioners to improve health outcomes through equitable employment opportunities.

Expérience de navigation et d’accès aux services de première ligne par des patients sans affiliation à un professionnel de santé

Presented by: Providence Munezero

All Authors: *Mylaine Breton1, Providence Munezero1, Magaly Brodeur1*
Author Affiliations: *1Université de sherbrooke*

Background and Objectives: L’affiliation du patient constitue un pilier essentiel du modèle des soins centrés sur le patient. Le Canada connait un nombre important de patients sans affiliation. Les difficultés rencontrées par ces patients au cours de leur navigation des services de santé restent peu documentées. L'objectif de l'étude est d'analyser les expériences et les défis liés à la navigation et à l'accès aux services de santé en première ligne pour les patients sans affiliation au Québec.

Approach: Les entrevues électroniques semi-structurées avec des patients sans affiliation au médecin de famille (n= 16) ont été réalisées entre avril 2021 et mai 2022. Les participants étaient recrutés via des annonces dans les médias sociaux et une stratégie boule de neige. Un échantillonnage ciblé a été privilégié, avec deux critères d'inclusion des participants : (i) ne pas être affilié à un médecin de famille, (ii) avoir besoin de consulter un professionnel de santé pendant la dernière année. Les entretiens ont été transcrits et une analyse thématique utilisant une approche mixte de codage est en cours à l’aide du logiciel NVivo12.

Results: Les résultats de l'analyse en cours des entrevues notent que les participants: 1) éprouvent des sentiments partagés quant à leur statut d’affiliation en fonction de leurs besoins en matière de santé. Ceux qui ont le plus de besoins se sentent abandonnés, tandis que d'autres se disent "chanceux" de ne pas avoir fréquemment besoin de soins, 2) reconnaissent la nécessité d’affiliation au médecin de famille notamment pour l’accès facile aux rendez-vous médicaux et au renouvellement d’ordonnances médicales, 3) font preuve de créativité dans leur recherche de points d'accès aux services de santé en première ligne et dans leur manière de naviguer dans le système, éviter les longs tempes d’attente aux urgences, 4)éprouvent des difficultés d’accès aux cliniques sans rendez-vous suite à longue distance à parcourir.

Conclusion: Les résultats de notre étude contribueront à identifier les aspects à maintenir ou à renforcer en matière de navigation et accès aux services de santé incluant notamment la littéracie en santé, l’organisation des services, la continuité et la coordination des soins en vue d’améliorer l'expérience-patient en première ligne.

A Content Validity Analysis to Inform the Selection of Quality of Life Measures for Healthcare and Policy Decision Making in Osteoarthritis

Presented by: Eunjung Na

All Authors: *Eunjung Na1, Ayse Kuspinar 1, Hannah Saylon2*
Author Affiliations: *1School of Rehabilitation Science, McMaster University , 2Faculty of Health Sciences, McMaster University*

Background and Objectives: Osteoarthritis (OA) affects millions of lives globally, emphasizing the need for effective tools to assess health-related quality of life (HRQoL). HRQoL measures are important for informing patient management strategies and policy decisions, and actively involving patient perspectives in healthcare delivery. The objective of this study was to assess the content validity of HRQoL measures, including generic and disease-specific measures in people with hip or knee OA.

Approach: Participants diagnosed with hip or knee OA over the age of 50 were recruited from across Canada. A personalized quality of life measure, the Patient Generated Index, and sociodemographic questions were administered through an online survey. Affected life areas identified by participants were categorized using the World Health Organization's International Classification of Functioning, Disability and Health (ICF). The frequency of specific ICF codes and overarching domains were calculated. The ten most frequent overarching domains were mapped onto various generic and disease-specific HRQoL measures and the percentage of content overlap was calculated to assess content validity.

Results: One hundred and two participants (76 female; mean age 63.4 ± 7.6; mean years of OA duration 14.0 ± 10.1) completed the questionnaires. The top ten ICF domains identified by participants were walking, changing and maintaining body position, moving around, recreation and leisure, sensory functions and pain, domestic life, carrying, moving, and handling objects, sleep functions, structures related to movement, and self-care. The Arthritis Impact Measurement Scale 2 (AIMS2) had the highest content coverage (100%) and Health Utilities Index 3 had the lowest (30%). Sensory functions and pain was the only domain covered by all generic and condition-specific measures and all condition-specific measures had content coverage above 90% based on the ten most frequent domains.

Conclusion: By identifying HRQoL aspects most impacted by OA, this research aims to enhance patient-centered care strategies. Condition-specific measures for OA demonstrate higher content validity than generic measures. The findings hold significance for clinicians, researchers, and policymakers, by informing decisions on outcome measures for effective program implementation and healthcare service delivery.

Associations between healthy lifestyle behaviours, cigarette smoking and nicotine-containing e-cigarette use among parents and adolescents

Presented by: Cristal Namuhoranye

All Authors: *Nicholas Chadi1, 2, Alice Moyne2, Tamara Perez1, Olivier Drouin1, 2, Cristal Namuhoranye1*
Author Affiliations: *1CHU Sainte-Justine, 2Université de Montréal*

Background and Objectives: Nicotine use continues to be a major public health concern in Canada, particularly with the rise of adolescent e-cigarette (vaping) use. There is a paucity of data describing the associations between smoking, vaping and other lifestyle behaviours in parental and adolescent populations. Our objective is to describe the associations between cigarette use, nicotine-vaping and lifestyle habits such as sleep duration, physical activity and diet quality to help identify potential targets for intervention.

Approach: As part of the CanCEASE (Canadian Clinical Effort Against Secondhand Smoke) study, parents and adolescents (aged 14-17 years) were approached during medical visits at Sainte-Justine hospital in Montreal, Québec to complete a questionnaire regarding their lifestyle behaviours and sociodemographic characteristics. Participants were categorized according to their nicotine use in the last 7 days and coded into three mutually exclusive categories: (1) non-smokers (2) e-cigarette users and (3) cigarette only or dual users (CoDU). Lifestyle behaviours such as sleep duration, diet quality and physical activity levels were analyzed and compared based on smoking status using chi-squared and ANOVA testing.

Results: In total, 437 parents and 261 adolescents participated in this study. Among parents, 11.8% were CoDU and 4.60% used e-cigarettes, while among adolescents, 8.4% were CoDU and 14.6% used e-cigarettes. Parents who reported exclusive e-cigarette use were younger (mean age 39.3 [SD 6.90]) than CoDU (41.54 [6.49]) and parents who were non-smokers (43.6 [6.7]); p=0.002. The majority of non-smoking parents reported more than 6 hours of sleep daily (58.5%), which was not the case among CoDU and exclusive e-cigarette users (44.8% and 47.6%, respectively), though the difference was not statistically significant. Physical activity levels were similar between parental groups (mean 2.76 days for non-smokers vs. 2.28 CoDU vs. 2.67 e-cigarette, p>0.05). Adolescent CoDU reported poorer diet quality compared to adolescent non-smokers and e-cigarette users (p=0.024).

Conclusion: Our findings suggest poorer diet quality among adolescent CoDU compared with smokers and non-users. No other differences in lifestyle behaviours were found within adolescent and adult groups. Associations between smoking status and lifestyle habits represent a point of interest for further analysis and a promising target for interventional approaches.

Palliative care near the end of life in community-dwelling people with and without dementia in Quebec (2007-2022)

Presented by: Sanjna Navani

All Authors: *Victoria Massamba1, Claire Godard-Sebillotte2, 3, Isabelle Vedel4, 5, Sanjna Navani2, Catherine Richer4, Marie-Hélène Guertin1, Louis Rochette1*
Author Affiliations: *1Institut national de santé publique du Québec (INSPQ), 2The Research Institute of the McGill University Health Centre, 3Department of Medicine, Division of Geriatrics, McGill University, 4Department of Family Medicine, McGill University, 5Lady Davis Institute, Jewish General Hospital*

Background and Objectives: Dementia is a progressive disease, characterised by a compounding loss of functioning that prolongedly dwindles and lacks clearly distinct phases. Unpredictability about the course of dementia progression impedes the administration of palliative care, especially at the end of life. People with dementia can greatly benefit from palliative care, which can improve the management of physical symptoms and pain, and address the psycho-social aspects of the disease borne by people with dementia and their care partners.

Approach: We will conduct a repeated yearly cohort study of community-dwelling people aged 65 years old and over in Quebec over a period of 15 years (2007-2022). In this sample, using data from the Quebec health administrative database, we will compare indicators of palliative care in people with and without dementia at the end of life. We will use indicators assessing the place of death, palliative care received during hospitalisation preceding death, and aggressive care received (hospital stays, visits to emergency departments, and stays in intensive care units) in the 90 days preceding death.

Results: Considering literature indicating gaps in providing palliative care to people with dementia, we expect lower palliative care near the end of life in people with dementia, compared to people without dementia. We expect this trend to be consistent over the years and across indicators.

Conclusion: We will describe differences in palliative care for people with and without dementia. Future research should aim to expand indicators (e.g., covering services provided at home and long-term care facilities) to provide a comprehensive portrait of the palliative care received by people with dementia, especially near the end of life.

To what extent are social determinants of health and related inequities mentioned and considered in national dementia strategies?

Presented by: Sanjna Navani

All Authors: *Sanjna Navani1, Georgia Hacker2, Claire Godard-Sebillotte1, 3, Isabelle Vedel4, 5*
Author Affiliations: *1The Research Institute of the McGill University Health Centre, 2The Michael G. DeGroote School of Medicine, McMaster University, 3Department of Medicine, Division of Geriatrics, McGill University, 4Department of Family Medicine, McGill University, 5Lady Davis Institute, Jewish General Hospital*

Background and Objectives: In response to global increases in dementia prevalence, countries are developing national strategies which improve dementia care to meet the needs of people living with dementia and their care partners. Social determinants of health (SDH) give rise to inequities that health outcomes in dementia: despite this impact, it is unclear whether dementia plans address SDH and to what extent. This study described whether national dementia strategies considered inequities and identified them as targets of concern.

Approach: We conducted an environmental scan: we screened strategies for eligibility and synthesised information through thematic analysis. We included accessible national-level strategies in English and French from countries that are part of the Organisation for Economic Co-operation and Development (OECD).

Results: Of the 15 dementia strategies that met inclusion criteria, 13 mentioned at least one inequity related to: Race/Ethnicity; Religion; Age; Disability; Sexual Orientation/Gender Identity; Social Class; and Rurality. Age was the most, and religion the least, frequently mentioned. 11 strategies included general inequity-focused objectives, while only 5 had specific objectives (tangible goals, deadlines, or budgets) for achieving equity-related targets.

Conclusion: Although most countries' dementia strategies mentioned inequities, only few had specific inequity-focused objectives. To reduce inequities in the care of persons with dementia, countries must not only consider inequities at a surface-level; rather, they must put forth actionable objectives that intend to lessen the impact of inequities in dementia care.

Prevalence, incidence, and the use of hospital services and medications in people with dementia living in Quebec (2000-2020)

Presented by: Sanjna Navani

All Authors: *Edeltraut Kröger1, 2, Éric Pelletier3, Louis Rochette3, Sanjna Navani4, Claire Godard-Sebillotte4, 5, Victoria Massamba3, Isabelle Vedel6, 7*
Author Affiliations: *1Center of Excellence on Aging in Quebec, CIUSS de la Capitale-Nationale, 2Faculty of Pharmacy, University of Laval,, 3Institut national de santé publique du Québec (INSPQ), 4The Research Institute of the McGill University Health Centre, 5Department of Medicine, Division of Geriatrics, McGill University, 6Lady Davis Institute, Jewish General Hospital, 7Department of Family Medicine, McGill University*

Background and Objectives: Dementia is characterised by cognitive impairment and functional decline that profoundly impact an individual's ability to independently care for themselves. More than 350 people develop dementia in Canada everyday (Alzheimer Society of Canada). We present an overview of indicators for dementia surveillance (prevalence, incidence, and use of hospital services and medications) developed in Quebec. These indicators are measured routinely and available to all members of the health and social services network through a web portal.

Approach: We described these surveillance indicators at the population-level, for people with dementia in Quebec, between the fiscal years 2000/01 to 2019/20. Incidence and prevalence were described in the Quebec population aged 40 and over, and indicators of hospitalisation and medication-use in the population aged 65 and over.

Results: Three times as many people aged 40 and over lived with a dementia diagnosis in 2019-2020 in Quebec (N=126,285 or 2.8% prevalence), compared to 2000-01 (N=43,130 or 1.4% prevalence). Annual incident cases doubled in this time-period, from 14,120 (4.9 per 1000 people) in 2000-01 to 24,475 (5.1 per 1000 people) in 2019-20. In the population aged 65 years old and over, people diagnosed with dementia used hospital services such as emergency departments up to three times more than people without a diagnosis of dementia. Regarding medication use, patterns vary across medications; however, people with a diagnosis of dementia use more psychotropic drugs (benzodiazepines, antipsychotics, and antidepressants) than those without a diagnosis.

Conclusion: This population profile shows a steady increase in the number of people diagnosed with dementia in Quebec and illustrates the high use of hospital services, emergency departments, and psychotropic drugs in this population. Surveillance indicators can inform decision-making in Quebec and support improved care strategies for people with dementia.

The impact of neighbourhood material deprivation on health service use in community-dwelling people with dementia from Quebec (2000-2017)

Presented by: Sanjna Navani

All Authors: *Isabelle Vedel1, 2, Louis Rochette3, Victoria Massamba3, Amélie Quesnel-Vallée4, 5, Sanjna Navani6, Nadia Sourial7, Geneviève Arsenault-Lapierre8, Claire Godard-Sebillotte6, 9*
Author Affiliations: *1Lady Davis Institute, Jewish General Hospital, 2Department of Family Medicine, McGill University, 3Institut national de santé publique du Québec (INSPQ), 4Department of Epidemiology, Biostatistics, and Occupational Health, McGill University, 5Department of Sociology, Faculty of Arts, McGill University, 6The Research Institute of the McGill University Health Centre, 7Department of Health Management, Evaluation and Policy, School of Public Health, University of Montreal, 8Center for Research and Expertise in Social Gerontology, 9Department of Medicine, Division of Geriatrics, McGill University*

Background and Objectives: Research has consistently shown that lower socioeconomic status (SES) is associated with higher dementia risk and lower cognitive performance: new evidence suggests that SES is also associated with disparities in dementia care and service use. The association between SES and health service use in people with dementia must be studied to ensure equity in dementia care across SES. Therefore, we described population-level trends of health service use across SES by people with dementia in Quebec.

Approach: We conducted a repeated yearly cohort study of community-dwelling people with incident dementia using the Quebec health administrative database (2000-2017). SES was assessed through material deprivation, a composite measure of the level of education, employment, and income of a census dissemination area. We described age standardised rates per 100 person-years of 23 indicators of care and health service use during the year following diagnosis across 5 levels of material deprivation based on individuals' areas of residence.

Results: Among the 193,834 community-dwelling people with a new diagnosis of dementia between 2000 and 2017, we found that 15 out of 23 indicators showed that service use differed across SES: for instance, those living in the most versus the least deprived areas had higher rates of hospitalisations, ED visits, and potentially inappropriate medication prescriptions. However, rates across other indicators, such as anti-dementia medication prescription and primary care visits, were comparable across SES.

Conclusion: Stark differences across SES may signal inequities in the use of health services by people with dementia. Future research should investigate these associations to better understand their underlying causes and mitigating strategies, in order to offer equitable care to all Canadians living with dementia.

A Canadian Act (Bill C-35) respecting early learning and children care: A review of key areas to address for children with disabilities and their families

Presented by: Linda Nguyen & Olawale Dudubo

All Authors: *Paul Yejong Yoo1, Olawale Dudubo 2, Keiko Shikako3, Roberta Cardoso 4, Jessica Hanson3, Linda Nguyen3*

Author Affiliations: *1Division of Neurosciences and Mental Health, SickKids The Hospital for Sick Children, 2Faculty of Dentistry and Oral Health Sciences, McGill University, 3School of Physical and Occupational Therapy, Faculty of Medicine and Health Sciences, McGill University, 4McGill University Health Centre*

Background and Objectives: The Canadian government plans to invest $30 billion over the next five years in a Canada-wide Early Learning and Child Care Plan to be introduced through Bill C-35. Children with disabilities experience significant barriers to accessing educational services and childcare, and families may need to bear caregiving duties and provide educational supports that should be publicly available. This rapid review was conducted to identify best practices for early education and childcare for children with disabilities.

Approach: We conducted a search of academic research published in English from January 2013 to August 2023 including children with any type of disability. We selected publications from countries with comparable political and socio-demographic characteristics as Canada, such as the United States, United Kingdom and Nordic countries.

Results: Our review included six studies that summarized four key topics to address. First, intensive daycare community programs in daycares can improve child developmental outcomes such as cognitive skills and social communication. Second, the establishment of multisectoral early childhood committees at the community level can support the successful implementation of early childhood policies. Third, capacity building for early childhood education can increase awareness about disabilities and inclusive education. Fourth, policy efforts should target access to childcare subsidies among the most vulnerable groups of children with disabilities and their families.

Conclusion: Findings from our review highlight best practices that can be used to inform a national strategy for childcare and early education, and public health and social development initiatives to support optimal health and development for children with disabilities and their families.

Access to medical cannabis in Canada: exploring policy, clinical and patient perspectives

Presented by: Jason Nie

All Authors: *Csilla Kalocsai1, Hance Clark2, Naomi Smith3, Robert Schwartz4, Graham Gould3, Susan Law5, Jason Nie6, Lorraine Smith7*
Author Affiliations: *1Sunnybrook Research Institute, 2Toronto General Hospital, 3University of Western Ontario, 4Ontario Tobacco Research Unit, 5University of Toronto, 6Trillium Health Partners, 7university of sydney*

Background and Objectives: People living with chronic pain are increasingly using medical cannabis (MC) to manage their symptoms. Although MC has been legally available in Canada since 2001, professional guidance, regulatory requirements, the legalization of recreational cannabis, and professional as well as public sentiment have limited access and influenced perceptions of acceptability. The Cannabis Act, including MC, is currently under review. We aimed to contribute information about current perceptions and possibilities to improve access for patients and providers.

Approach: We conducted a qualitative study with various stakeholders representing a diverse range of disciplines and backgrounds who had expertise and lived experience of navigating Canada's current system for access to medical cannabis. Participants were purposively sampled, including health professionals involved in the prescribing or dispensing of MC, researchers, decision makers, MC suppliers, and patients with lived experience. Nineteen individual interviews were conducted with stakeholders. We then held three focus groups with patients. Finally, a roundtable was held with 30 participants about plausible next steps for policy and practice to reduce the barriers to medical cannabis for providers and patients.

Results: Four main themes were identified from analysis of the qualitative data: 1) knowledge gaps and challenges in research, 2) procedural and educational barriers for clinicians, 3) variations in quality of care and patient experience, and 4) concerns about future access to MC. The roundtable discussions highlighted key themes and recommended actions, including: 1) the need for clinical education in evidence-based care, 2) to better support patient self-management, 3) to reduce stigma for patients and professionals, and 4) to advance the model of care for MC. The group envisioned a system characterized by open dialogue between patients and professionals about the appropriate use of MC, access via pharmacies, insurance coverage and attention to equity and the needs of vulnerable groups - via a distinct medical regulatory pathway.

Conclusion: This study explored policy, clinical and patient perceptions related to access to medical cannabis in Canada. Novel approaches are needed for formalizing and improving access to MC for patients seeking to better manage their pain and other symptoms and for the clinicians who care for them.

Organizational maturity for artificial intelligence in academic health centers

Presented by: Jean Noel Nikiema

All Authors: *Jean-Louis Denis1, Jean-Noël Nikiema1, Khedidja Seridi2, Kamran Afzali2, Aude Motulsky1, Yves Terrat2, Pascale Béliveau2*
Author Affiliations: *1Département de gestion, évaluation et politique de santé, Université de Montréal, 2Consortium santé numérique, Université de Montréal*

Background and Objectives: Artificial intelligence (AI) has gained a lot of attention in the past decade as a technology with great potential to improve efficiency and quality of care in hospitals. However, given the low digital maturity of Canadian hospitals, little is known on the organizational readiness to harness the potential of AI while limiting its risks. The objective of this project was to develop a framework to evaluate organizational AI maturity by focusing on Academic Health Centers.

Approach: A maturity framework for Academic health center was developed from the scientific and gray literature to complement existing organizational digital maturity indexes. It was adapted with experts and professionals (n=12) from an AHC in the Province of Quebec. The first version of the framework included four dimensions (organization, people, technology, data) graded by three maturity levels (foundation, exploration, expansion). The framework was piloted through 21 interviews with senior managers and stakeholders involved in AI projects. A final score was calculated for each dimension, and presented to each interviewee. Their comments were integrated into the final version of the framework.

Results: There was considerable heterogeneity in individual perceptions regarding how the AHC positioned within each dimension of the AI framework. This heterogeneity suggests a low convergence of representations around AI definition and what is required for safe and usable AI technologies to be implemented and adding value. This might be related to the diffuse and rapidly evolving nature of AI technologies along with the swift changes in their underlying principles and business models. Divergences were particularly important around appropriate infrastructures and services, data quality, and data access for supporting trustworthy AI implementation. On average, the AI maturity score of the AHC was at the foundation level on each dimension.

Conclusion: Overall, the framework developed was useful to assess the organization's AI maturity. However, further research is needed to complete dimensions to comprehensively encompass the evolving landscape of AI and its related challenges in research and development, as well as to support operations of AHC.

Le Patient partenaire accompagnateur en neurochirurgie au CHUM: Un nouvel acteur dans l'équipe clinique pour humaniser les soins

Presented by: Isaac Niyonzima

All Authors: *Isaac Niyonzima1, Enora Le Roux2, Marie Pascale Pomey3, 4, 5, Louise Normandin6*
Author Affiliations: *1École de Santé Publique de l'Université de Montréal, QC, CA, 2Université Paris Cité, ECEVE UMR 1123, Inserm, Faculté de Médecine, Paris, France., 3Centre d'excellence sur le partenariat avec les patients et le public, Montréal, QC, CA, 4Département de Gestion, évaluation et politique de Santé de l'École de Santé Publique de l'Université de Montréal, QC, CA, 5Département de Médecine de famille, Université de Montréal, QC, CA, 6Centre de Recherche du Centre Hospitalier de l'Université de Montréal, QC, CA*

Background and Objectives: Le service de neurochirurgie du CHUM a introduit une patiente accompagnatrice (PA), soit une ancienne patiente du service, dans son équipe clinique. Cette recherche porte sur l'évaluation de la perception de l'apport de la PA dans le service de neurochirurgie et plus spécifiquement sur comment la PA contribue à améliorer l'expérience du patient et de ses proches, contribue à l'engagement des patients dans leurs soins et modifie les relations soignants-patients.

Approach: Une étude qualitative, observationnelle et exploratoire utilisant une approche interprétative a été conduite. Les populations à l'étude sont les neurochirurgiens du service (n=3), les autres professionnels de santé (gestionnaires, infirmiers, infirmiers chefs, ergothérapeute, physiothérapeute, nutritionniste, travailleur social, préposé aux bénéficiaires, auxiliaire infirmier) (n=14), les membres de la Direction qualité, évaluation, performance et éthique (n=3). Des entretiens individuels semi-dirigés et l'observation non participante dans le service ont été réalisés. Le contenu des entretiens a été enregistré et retranscrit afin d'en faire une analyse thématique.

Results: La durée moyenne des entretiens a été de 30 minutes. Les résultats montrent que la PPA est un membre de l'équipe clinique à part entière, elle facilite la relation soignant-patient et contribue à l'amélioration de la qualité des soins dans le service. La PA est un soutien émotif réconfortant pour les patients hospitalisés et leurs proches. La PA soutient les patients à développer leur motivation et leur engagement dans leurs soins. Finalement, elle fournit à l'équipe clinique les perspectives du patient afin qu'ils puissent mieux les prendre en compte dans le processus de soins.

Conclusion: La PA est un nouveau modèle d'innovation qui s'inscrit dans l'approche de partenariat patient dans le domaine clinique. Tous les participants apprécient ce modèle qui rend l'hospitalisation des patients la plus humaine possible. Ce modèle s'inscrit dans une relation privilégiée PA-Médecin et reste dépendant de cette relation.

COVID-19 vaccination incentive strategies: An integrative review and best fit framework analysis

Presented by: Agatha Nyambi

All Authors: *Jamie Stumpf1, Meshaal Kurram1, Elizabeth Alvarez1, Agatha Nyambi1, Stephen Su1*
Author Affiliations: *1McMaster University*

Background and Objectives: Governments around the world had to ensure that COVID-19 vaccines were delivered to their respective populations. One of the methods used to increase vaccine uptake was to incentivize people to get vaccinated, but there is no consensus on the effectiveness of these incentivization strategies. We will examine a wide range of strategies to compile the available literature on COVID-19 vaccination incentivization strategies, programs, and policies, and develop a comprehensive conceptual framework for vaccine incentivization.

Approach: Integrative systematic review with best fit framework analysis searching the following databases: Cochrane, Scopus, NIH COVID-19 portfolio, Econlit, APA PsycINFO, Global Health, OVID MEDLINE and Embase. Articles were included if they discussed COVID-19 vaccine incentive interventions or frameworks. Title and abstract review, full text review, and data extraction will be conducted by 2 independent team members, with consensus from a third reviewer, if needed. The Quality Assessment with Diverse Studies tool will be used to appraise the quality of included studies.

Results: 5984 articles remained for title and abstract screening and 299 were retained for full text screening. 198 articles were retained for extraction. We identified four main categories of incentives: financial (cash, lotteries or cash equivalents), mandates (including workplace, school or other institutional vaccine policies), vaccine passports (local and travel-related), and other (non-financial gifts or prizes). The ecological approach to health framework (intrapersonal, interpersonal, institution, community, system) and the public health systems arrangements framework (governance, financial, delivery, partnerships and communication) will be used as starting points to determine a best-fit framework.

Conclusion: Many of these incentives were found to be effective in some contexts but not in all contexts or in all population subgroups. We will present a framework for vaccine incentives with pros and cons of each strategy as found in the data.

The Impact of Alcohol Use and Related Harms among Diverse Population Groups during the COVID-19 Pandemic in Canada

Presented by: Tolulope Ogunyomi

All Authors*: Tolulope Ogunyomi1*
Author Affiliations: *1University of Toronto*

Background and Objectives: Diverse populations face many inequities which make them disproportionately affected by alcohol use and related harms. The COVID-19 pandemic has exacerbated the alcohol in Canada. The purpose of this paper is to evaluate alcohol use and related harms in the context of the COVID-19 pandemic among diverse population groups in Canada. This will done using an intersectional lens where the findings will be disaggregated according to categories related to the social determinants of health.

Approach: A systematic search was conducted using Medline, Embase and Global Health databases to identify studies between June 2021 and May 2023. A grey literature search was also conducted for information published between the years 2021 and 2023. There were 54 studies included. The inclusion criteria included studies done in a Canadian context, published in English, and focused on alcohol use and related harms during the COVID-19 pandemic. The results from this paper were disaggregated according to the social determinants of health. Some of these categories include race and mental health.

Results: The pandemic took a toll on the mental health of many Canadians and affected people's access to many support services. Groups that face stigma and discrimination such as Indigenous and 2SLGBTQI+ communities were the most impacted. A lack of culturally competent healthcare, racism, and discrimination can explain some of these disparities. Furthermore, those who experience mental health conditions such as depression, or anxiety are more likely to have increased their alcohol consumption during the pandemic. This may have been due to the mandatory COVID-19 measures such as physical distancing and social isolation which affected the mental health of many persons living in Canada. Some people were using alcohol as a coping mechanism to deal with the challenges and trauma associated or evoked during the pandemic.

Conclusion: It is important to have initiatives that address mental health concerns such as depression, anxiety, etc. Furthermore, healthcare providers also need to receive training on cultural sensitivity when supporting stigmatized populations. These programs/policy recommendations can help alleviate some of the inequities related to alcohol harms caused by the pandemic.

Barriers Faced by Black People in Canada When Accessing Healthcare

Presented by: Tolulope Ogunyomi

All Authors: *Tolulope Ogunyomi1*
Author Affiliations: *1The University of Toronto - Dalla Lana School of Public Health*

Background and Objectives: Systemic racism has severe impacts on the health access and outcomes of Black populations in Canada. Because of the inequities in accessing health care services, there is a multitude of avoidable health disparities that are experienced such as increased mortality rates, increased prevalence of chronic diseases, and more. The purpose of this paper is to provide a synthesis of the current research about the barriers that Black populations experience when accessing health care in Canada.

Approach: A systematic search was conducted using Medline and Embase databases. There were a total of 13 studies and reports identified. A grey literature search was also conducted. There were specific inclusion and exclusion criteria that aided in selecting the studies. The inclusion criteria included studies done in a Canadian context, published in English, published between 2000 and 2022, and focused on the barriers to accessing health care that were faced by Black people in Canada. The exclusion criteria were that no scoping reviews and no systematic reviews were used.

Results: One of the barriers that prevented Black people from accessing health services was experiences of covert and overt racism and discrimination. In addition, mistrust towards the healthcare system and a lack of culturally sensitive care prevented Black populations from accessing and utilizing healthcare resources and undergoing relevant procedures. The inability to afford some health care services such as mental health care, eye care, and medications prevented many Black Canadians from using them as they are disproportionately represented in lower-income communities. In addition to financial barriers to health care, there were also geographical barriers that decreased access to health services for Blacks in Canada due to the distant location of health services that met their needs.

Conclusion: There is a lack of race-based data in Canada, leaving many communities to fall through the cracks of the healthcare system. Research, programs, and interventions that target these barriers can be developed to promote equity and access for Black populations within the Canadian healthcare system.

The Impact of Opioid Use and Related Harms among Diverse Population Groups during the COVID-19 Pandemic in Canada

Presented by: Tolulope Ogunyomi

All Authors*: Tolulope Ogunyomi1*
Author Affiliations: *1University of Toronto*

Background and Objectives: Diverse populations face many inequities which make them disproportionately affected by opioid use and related harms. The COVID-19 pandemic has exacerbated the opioid epidemic in Canada. The purpose of this paper is to evaluate opioid use and related harms in the context of the COVID-19 pandemic among diverse population groups in Canada. This will done using an intersectional lens where the findings will be disaggregated according to categories related to the social determinants of health.

Approach: A systematic search was conducted using Medline, Embase and Scopus databases to identify studies between June 2021 and May 2023. A grey literature search was also conducted for information published between the years 2021 and 2023. There were 55 studies included. The inclusion criteria included studies done in a Canadian context, published in English, and focused on opioid use and related harms during the COVID-19 pandemic. The results from this paper were disaggregated according to the social determinants of health. Some of these categories include race, housing status, and socioeconomic status.

Results: The pandemic took a toll on the mental health of many Canadians and affected people's access to many support services. The populations that were the most impacted belonged to vulnerable groups, including people experiencing homelessness, racialized groups, and lower-income groups. Systemic racism, discrimination, and trauma against racialized populations in health care contributed to the racial disparities seen for opioid use and related harms. People experiencing homelessness are often impacted by opioid use due to the stressors and/or barriers to healthcare access which contribute to high rates of opioid use as a coping mechanism. Factors such as financial instability, unemployment, and lack of educational opportunities can contribute to increased use of opioids as a means to manage stress and mental health.

Conclusion: It is important to have initiatives that promote affordable housing, where harm reduction services are easily accessible. Healthcare providers also need to receive training on cultural sensitivity when supporting racialized populations. These programs/policy recommendations can help alleviate some of the inequities related to opioid harms caused by the pandemic.

Advancing Family Medicine Research: A Guidance Report for the College of Family Physicians of Canada (CFPC)

Presented by: Dima Omar

All Authors: *Dima Omar1, Steve Slade1*
Author Affiliations: *1College of Family Physicians of Canada (CFPC)*

Background and Objectives: The College of Family Physicians of Canada (CFPC) has taken steps to better understand the role it can play to support family medicine (FM) research, including FM's role in primary care and throughout the health system. The challenges faced by FM and family physicians makes it essential to engage and support researchers, using evidence for health system improvement. This presentation outlines the roles and actions the CFPC can take to strengthen FM research in Canada.

Approach: Development of a guidance report began in August 2022 and was informed by individuals and organizations within Canada and abroad. An iterative approach was used to continually clarify and refine potential opportunities and areas of action to support FM research. The process involved a variety of information-gathering and consultative steps. Initial interviews with key informants (Consultations Phase 1) established broad direction and thematic foci. An environmental scan clarified the current research environment in Canada and internationally. Focus group consultations (Consultations Phase 2) and a representative survey of CFPC Members (Consultations Phase 3) helped define roles and actions for the CFPC.

Results: The environmental scan and consultative input from almost 400 CFPC members produced a planning framework identifying 36 key actions across four main roles for the CFPC: i) building knowledge and skills, ii) facilitating research collaboration and coordination, iii) advocating for support for FM research, and iv) promoting FM research and its value. While all actions could enhance FM research in Canada, providing focus and identifying priorities was an important part of the process. Nine actions were prioritized, with equity, diversity, and inclusion (EDI) incorporated into each action. These actions span three constituencies: CFPC Members, the Discipline/Profession of Family Medicine, and Society. The CFPC, in either a leadership or supporting role, aims to enhance knowledge, advocate for resources, support researchers, and leverage research for healthcare planning.

Conclusion: The CFPC Board endorsed the guidance report in December 2023. Next steps include continuous engagement with the research community, conducting a gap analysis, and developing an implementation plan. The report positions the CFPC to address FM challenges through research and maximize the impact of FM researchers in Canada's health system.

Impact of team-based primary care on income-related inequities in primary care utilization in Quebec and Alberta

Presented by: Sujita Pandey

All Authors: *Sujita Pandey1, Dr. Mohammad Hajizadeh1*
Author Affiliations: *1Faculty of Health, School of Health Administration, Dalhousie University*

Background and Objectives: By coordinating across multidisciplinary team of health professionals, team-based primary care aims to improve access by addressing the complexities of current primary healthcare needs. In provinces that implemented system-wide primary care teams, Quebec and Alberta, there have been several studies on the overall impacts of team-based care reform on utilization and health outcomes. However, there has been no analysis regarding the distributional impact of the reform on primary care utilization by socioeconomic status.

Approach: We estimate if primary care utilization improved equitably across varying socioeconomic status for the same level of need after team-based primary care was introduced in Quebec in 2002 and Alberta in 2003. Using 2000/01 and 2013 Canadian Community Health Survey (CCHS, N=45,310), we investigate income-related inequities in need standardized primary care utilization by estimating the horizontal inequity (HI) index care in GP and nurse visits before and after team-based care implementation. The HI index ranges between -1 to 1 and positive values of the index indicate higher income individual utilize more healthcare compared to lower income individuals and vice versa.

Results: After standardizing for need by age, sex and chronic conditions, the HI index for both GP and nurse visits were positive in Alberta and Quebec for both periods. This result suggests that higher income individuals used more primary care compared to lower income individuals for the same level of need. Furthermore, a decade after team-based primary care was implemented, the HI index for GP visits doubled in Quebec and Alberta whereas the HI index for nurse visits did not change, implying income-related inequities for need standardized GPs visits increased. Results indicate team-based care primary goal of improving access to primary care has not operationalized for everyone in the socioeconomic continuum.

Conclusion: While the goal of team-based care is to improve access to primary care, our results indicate that income inequities in need-standardized GP visits where present even after the reform. Our study suggests primary care and public health policies need to target barriers to primary care access for lower socioeconomic groups.

Work & Life Stress Experienced by Professional Workers During the Pandemic

Presented by: Jungwee Park

All Authors: *Jelena Atanackovic1, Jungwee Park2, Henrietta Akuamoah-Boateng1, Ivy Bourgeault1, Melissa Corrente1*
Author Affiliations: *1University of Ottawa, 2Statistics Canada*

Background and Objectives: Work and home life were impacted by the COVID-19 pandemic which highlighted pre-existing stressors and introduced new challenges for professional workers. Although research has been published focusing on workplace mental health, there has been a dearth of research that considers the impact of gender identity/roles or develops targeted workplace mental health promotion initiatives. This presentation explores the diverse stressors that professional workers experienced due to the COVID-19 pandemic.

Approach: This presentation draws on two pan-Canadian sources to address the impact the pandemic had on professional workers: The Canadian Community Health Survey (2019, 2020, 2021) administered by Statistics Canada and the Healthy Professional Worker Survey (2021) conducted by a pan-Canadian research team. The two datasets included a variety of professional workers; academics, accountants, dentists, nurses, physicians, and teachers. Utilizing two datasets allowed us to compare and contrast the circumstances of professional workers with non-professional workers. Descriptive and analytical statistics helped us examine the prevalence and odds of self-perceived life stress and work stress to assess the inter-group differences.

Results: Work overload emerged as the most frequently selected source of work stress across most professions. Digital stress, poor work relations, and uncertainty were cited as the top sources of work stress across numerous professions. The proportion of women health professionals reporting high work stress was about 20 percentage points higher than that of men (61% vs 41%). Both men and women reported higher non-work related stress levels during COVID-19. The primary source of non-work stress across all professions was time pressure followed by caring for children and physical and mental health conditions. Overall we found the negative impact of the pandemic on work stress was greater among women professional workers.

Conclusion: Taking into account gender identity and gender roles at work and home matters. Investigating the sources of work and life stress amongst professional workers involves a comprehensive approach that focuses on organization and system level changes to ensure that professional workers remain happy and healthy during the workday.

The Association Between Poor Social Health, Polypharmacy and Potentially High-Risk Medication Use

Presented by: Zain Pasat

All Authors: *Gustavo Duque1, Jonathan Broder2, Justin Lee3, Alexandra Papaioannou3, Michael Ernst4, John McNeil2, Zain Pasat3, Julia Gilmartin-Thomas5, Rosanne Freak-Poli2*
Author Affiliations: *1McGill University, Montreal, Canada, 2Monash University, Melbourne, Australia, 3McMaster University, Hamilton, Canada, 4University of Iowa, Iowa City, USA, 5La Trobe University, Melbourne, Australia*

Background and Objectives: Poor social health (loneliness, social isolation and/or low social support) is associated with physical and psychological symptoms in older adults, such as pain, insomnia, anxiety, and depression. These symptoms may lead to prescription of multiple high-risk medications (where the risk of adverse drug events often outweigh the potential benefits) rather than social interventions that may address their underlying causes. We sought to evaluate the relationship between poor social health and polypharmacy and/or high-risk medication use.

Approach: We conducted a secondary analysis of 16,439 older adults in the ASPREE Longitudinal Study of Older Persons (ALSOP), a retrospective observational cohort sub-study of the ASPirin in Reducing Events in the Elderly (ASPREE) randomized controlled trial. We used logistic regression to test whether loneliness, social isolation or lack of social support (individually and as a composite measure) were associated with polypharmacy (≥5 medications) and/or potentially high-risk medication use (i.e. opioids, sedative/hypnotics, and antidepressants). Loneliness, social isolation and social support were identified using the Revised Lubben Social Network Scale, Duke Social Support Index and the Center for Epidemiological Studies Depression Scale.

Results: We identified 1259 older adults with poor social health; 552 were lonely, 133 were socially isolated and 742 had low social support. Polypharmacy was associated with loneliness (odds ratio [OR] 1.46, 1.18-1.80, p<0.001) and low social support (OR, 1.13-1.67, p=0.002), but not social isolation. Poor social health (as a composite measure) was not significantly associated with polypharmacy. Poor social health was associated with sedative/hypnotic (OR 1.47, 1.20-1.78, p<0.001), opioid (OR 1.98, 1.41-2.72, p<0.001) and antidepressant use (OR 1.79, 1.33-2.21, p<0.001), but thresholds for statistical significance were not met in analyses adjusted for age, sex, frailty, and other available co-morbidity and sociodemographic risk factors.

Conclusion: Loneliness and low social support are associated with polypharmacy and they are important risk factors to consider when trying to deprescribe and optimize the medication use of older adults. Larger studies are needed to better understand the impact of poor social health on the prescription of many potentially high-risk medications.

Changes in Health and Function After COVID-19 infections among LTC Residents in Ontario

Presented by: Kruti Patel

All Authors: *Luke Turcotte1, Stacey Fisher2, Colleen Webber2, Bradley Godwin3, Amit Arya4, Peter Tanuseputro5, John Hirdes6, Kevin Brown7, Sarina Isenberg5, Daniel Kobewka3, Paul Herbert5, Reem Mulla6, Daniel Myran2, Wenshan Li2, Edward Spilg3, Kruti Patel5, Rachel Sa*

Author Affiliations: *1Brock University, 2Ottawa Hospital Research Institute, 3The Ottawa Hospital, 4North York General Hospital, 5Bruyère Research Institute, 6Univesity of Waterloo, 7Public Health Ontario, 8Women's College Research Institute, 9McMaster University, 10University of Ottawa, 11University of Toronto*

Background and Objectives: The COVID-19 pandemic introduced significant challenges to the long-term care population in Canada. The vulnerabilities of older adults, specifically in long-term care (LTC) homes, were exacerbated and there were greater concerns for their health, due to the novel nature of the virus. The aim of this study is to describe the changes to the health and functioning of LTC residents following a confirmed COVID-19 infection.

Approach: This retrospective cohort study uses population-based health administrative data that is housed, linked, and analyzed at ICES. The study examined LTC residents between March 1, 2020 to March 21, 2022. LTC residents with COVID-19 infections were matched to residents without infections. The Case and Case Management System and Resident Assessment Instrument - Minimum Dataset Version 2.0 provided data to determine COVID-19 infection status and measures of health and functioning of residents. Outcomes, including new onset health conditions, mental health outcomes, and mortality, were compared between residents with and without a COVID-19 infection.

Results: A total of 84,029 LTC residents were included in this study with 25,317 (30.1%) residents having at least one confirmed COVID-19 infection while in LTC. In the COVID+'ve group, 9,219 (36.4%) residents received three or more COVID-19 vaccines prior to their infection. The 12-month mortality between the COVID+'ve and COVID-'ve group was 34.7% (8,783) and 53.4% (31,235), respectively (p-value:<.0001). In the 6-12 months period following infection, 26.3% (6,648) of residents from the COVID+'ve group experienced moderate cognitive impairment, which was higher than the COVID-'ve group (21.1%, 12,372; p-value:<.0001). A greater proportion of COVID+'ve residents, compared to the COVID-'ve residents, had a following respiratory infection in the 6-12 month period post-infection (1.3%, 328 vs. 0.7%, 417; p-value:<.0001).

Conclusion: The preliminary findings illustrate the burden of COVID-19 infection on the health older adults in LTC homes across Ontario. The results can inform the allocation of resources and supports in LTC homes to mitigate the adverse impact of COVID-19 infections.

The Experience of Social Isolation Among Older Adults Entering LTC Homes and its Impact on Acute Care Use and Mortality

Presented by: Kruti Patel

All Authors: *Daniel Kobewka1, Rachel Savage2, Matthew Quinn1, Edward Spilg1, Stephanie Chamberlain3, Reem Mulla4, Annie Robitaille5, Daniel Myran6, Paul Herbert7, John Hirdes4, Stacey Fisher6, Kruti Patel7, Colleen Webber6, Wenshan Li6, Paula Rochon8, Amit Arya9, Kevi*
Author Affiliations: *1The Ottawa Hospital, 2Women's College Research Institute, 3University of Alberta, 4University of Waterloo, 5University of Ottawa, 6Ottawa Hospital Research Institute, 7Bruyère Research Institute, 8University of Toronto, 9North York General Hospital, 10Public Health Ontario, 11Brock University, 12McMaster University*

Background and Objectives: Older adults have a greater propensity to experience social isolation due to health and/or function changes, transitions to institutions for care, and bereavement. There are gaps in research on the impacts of social isolation on the health of long-term care (LTC) residents. This study aims to understand the burden of social isolation among older adults in LTC homes and determine its association with mortality and healthcare use.

Approach: The retrospective cohort study uses population-based health administrative data that is housed, linked, and analyzed at ICES. We determined the social isolation status and baseline health and functioning of newly admitted older adults in LTC homes between January 1, 2015 to December 31, 2018, using the Resident Assessment Instrument - Minimum Dataset Version 2.0. Outcomes, including acute care use, mortality, and health outcomes in the 6- and 12-months following home admission, will be determined through descriptive statistics. Regression models will examine the impact of social isolation on acute care use and mortality.

Results: We will describe the burden of social isolation among older adults in LTC homes in Ontario. The demographics, socioeconomic characteristics, physical health, cognition, function, and mental health of LTC residents will be described based on the presence or absence of social isolation. We will describe the association between social isolation and acute care utilization among LTC residents using regression models. The mortality among LTC residents will be outlined to determine the impact of social isolation in the population.

Conclusion: The results will inform the planning and allocation of resources to support residents who are experiencing social isolation. The findings of this study will identify vulnerable, socially isolated LTC residents and the associated health outcomes that provide guidance and justification for social engagement programs in institutions.

Assessing Palliative Care Quality Measures to Identity the Involvement of Patient and Caregiver Priorities and Experiences: A Scoping Review

Presented by: Kruti Patel

All Authors: *James Downar1, Colleen Webber2, Samuel Tiukuvaara3, Peter Tanuseputro1, Deena Fremont3, Lauren Konikoff1, Julie Lachance4, Deborah Dudgeon5, Penelope Hedges6, Kruti Patel1*

Author Affiliations: *1Bruyère Research Institute, 2Ottawa Hospital Research Institute, 3University of Ottawa, 4Health Canada, 5Queen's University, 6n/a*

Background and Objectives: Palliative care is patient- and family-oriented. An aging, vulnerable population requires responsive palliative care. Quality indicators are crucial to the assessment and improvement of palliative care health services. These indicators must incorporate the priorities and needs of patient and their families. The objective of this scoping review is to assess if patient, family members, and/or caregivers have their preferences, priorities, and experiences inform palliative care quality indicators.

Approach: A peer-reviewed and grey literature search was conducted on four databases (MEDLINE, EMBASE, CINAHL, and PsychINFO) and Google, respectively, in November 2022 (search being update). Publications and resources from before 2010, in languages other than English, and did not address on palliative care quality indicators were excluded. Four authors conducted the peer-reviewed literature screening and data extraction with conflict resolution occurring in a team setting. The grey-literature screening and data extraction was conducted by KP. The data was summarized based on study characteristics, focus on application or development of quality indicators, and the involvement of patients, family members, and/or caregivers.

Results: A total 128 peer-reviewed articles and five (5) grey literature resources were included following the screening process, from the initial search in November 2022. A majority of the peer-reviewed articles were published between 2020-2022. Cross-sectional study design and surveys were the most cited research and data collection methods, respectively, among peer-reviewed articles. 75 (58.6%) peer-reviewed articles studied the application of palliative care QIs, while 54 (42.2%) peer-reviewed articles focused on the development of QIs. Psychometric tests, interviews, and expert panels were frequently noted in the development process for articles. 76 (59.4%) peer-reviewed articles and 4 (80%) resources indicated some type of patient, family member, and/or caregiver involvement. Various authors indicated the lack of patient, family member, and/or caregiver involvement being a limitation to their research.

Conclusion: There is patient, family member, and caregiver involvement in palliative care quality indicators development and application, but the magnitude of involvement highly varies. The review highlights opportunities of further involving patients, families, and/or caregivers in developing responsive quality indicators for palliative care.

The Red River Métis Cancer Journey: Experiences Accessing and Navigating the Cancer Care System

Presented by: Chantal Perchotte

All Authors: *Olena Kloss1, Julianne Sanguins2, A. Frances Chartrand1, Chantal Perchotte1, Wajihah Mughal1*
Author Affiliations: *1Manitoba Métis Federation, 2University of Manitoba*

Background and Objectives: Cancer is the leading cause of mortality among Red River Métis, yet limited documentation exists about their cancer journey, contributing to health inequities within the Manitoba healthcare system. The absence of culturally safe and distinctions-based cancer care exacerbates these disparities.

Approach: Employing a community-based participatory research approach, seven focus groups were conducted with Red River Métis Citizens at the Manitoba Métis Federation (MMF) Métis Health Summit, held virtually in 2021. Additionally, six interviews were conducted with healthcare professionals working within cancer care services in Manitoba. A grounded theory approach was used to analyze the recorded and transcribed data followed by the collective consensual data analytical process.

Results: A total of 85 Red River Métis individuals living with cancer, cancer survivors, and their families ranging from 16 to 70+ years of age (16-29 years, 23.53%; 50-59 years, 23.53%), participated in discussion groups. Participants identified as non-binary or other (4.71%), as male (15.29%), and a majority as female (80%). Participants experienced inadequate access to screening and prevention services, lack of transportation and financial means as barriers to care, discrimination, and absence of Métis-specific and culturally safe care. Healthcare professionals underscored the distance to cancer care services as a major barrier for patients and acknowledged a lack of distinctions-based cultural safety training.

Conclusion: Developing and implementing distinctions-based programming and policy recommendations is imperative to alleviating the identified barriers experienced by Red River Métis during their journey. Addressing such barriers necessitates long-term collaborative commitments from the MMF, provincial health authorities and local and national cancer organizations.

Radar on Radon: Radon Education and Assessment for Community Health in Red River Métis

Presented by: Chantal Perchotte

All Authors: *Chantal Perchotte1, Tetiana Shcholok2, Alycia Fletcher3, Wajihah Mughal4, Frances A. Chartrand5, Julianne Sanguins6, Olena Kloss7*
Author Affiliations: *1chantal.perchotte@mmf.mb.ca, 2Tetiana.Shcholok@mmf.mb.ca, 3alycia.fletcher@mmf.mb.ca, 4wajihah.mughal@mmf.mb.ca, 5fchartrand@mmf.mb.ca, 6julianne.sanguins@mmf.mb.ca, 7Olena.kloss@mmf.mb.ca*

Background and Objectives: Radon, an odorless carcinogenic gas, is detected in elevated levels within 19% of Manitoban homes, constituting the primary cause of lung cancer in non-smokers. The Red River Métis (Métis) community experiences a significantly higher risk of lung cancer with a 30% reduced likelihood of survival 5 years post-diagnosis. Despite this, there is a notable absence of studies assessing radon levels within Métis households, especially in rural and remote Manitoba communities.

Approach: A total of 109 radon testing kits were installed in 99 Métis participant households throughout Manitoba. Radon levels were measured for 90 days in the lowest living space of each household during the cold winter months. After 90 days, participants sent out testing kits for certified laboratory analysis. Participants also provided their knowledge of radon through pre- and post-surveys during the testing period.

Results: Preliminary findings of 87 test kits from 79 households (wherein 8 homes received two kits) were analyzed, the remaining 22 test kits are pending. Evaluation of radon levels from the 79 Métis households revealed that 35.6% of homes exhibited elevated radon levels, surpassing the provincial average by 16.6%. In contrast, 64.4% of homes displayed lower radon levels. Currently, 73% of households have completed their post surveys and results are being analyzed.

Conclusion: Consistent monitoring of radon levels and implementation of mitigation systems are recommended measures to mitigate the risk of lung cancer. The prevalence of elevated radon levels in Métis households underscores the urgency for further research and targeted interventions to address this concerning health disparity.

Economic evaluation of an internet-delivered self-directed mindfulness-based cognitive behavioural therapy with mindfulness program (CBTm)

Presented by: Essence Perera

All Authors: *Essence Perera1, Shay-Lee Bolton1, Nathan Nickel1*
Author Affiliations: *1University of Manitoba*

Background and Objectives: Trends in Canada show that mental health was exacerbated in the COVID-19 pandemic. Many Canadians with mental health concerns do not receive treatment from a professional. Effective evidence-informed internet-based mental health programs exist, however there is limited access to these programs through the public health system. The proposed study is an economic evaluation of an internet-based mental health program, to assess the healthcare costs incurred by Manitobans who completed compared to those who did not.

Approach: The purpose of this study is to quantify the provincial healthcare burden due to use and costs incurred by Manitobans who have completed a mental health intervention, Cognitive Behavioural Therapy with mindfulness (CBTm), compared to those who have not completed the program. CBTm is an evidence-based program designed to promote mental health. Eligible participants will be adults (age 18 or older) located within Manitoba. Costs of hospitalizations, prescription use, and physician visits incurred by individuals will be compared for two subgroups: a) those who completed the CBTm program, and b) mental disorder-matched group who did not complete the CBTm program.

Results: The current proposal is novel given the limited health economics literature on internet-based, self-directed publicly funded mental health programs. This study may serve to provide important information to policymakers to guide future decision-making of mental health service delivery. As this is a protocol, if the results show that healthcare burden among CBTm-completers is lower than those who did not completed the program, then this will highlight that a priority of healthcare spending should be set to improve mental health promotion and treatment. Further, this will highlight the importance of investing in CBTm. The findings of this study will be disseminated via academic settings such as: conferences and publication with open access; and via community settings including: governmental bodies (e.g., Shared Health, Manitoba clinics and hospitals).

Conclusion: Mental healthcare must be prioritized to improve health and economic outcomes. The results of this work have the potential to inform the wider-scale implementation of internet-based, self-directed mental health programs.

Accelerating Clinical Trials for First Nations in Manitoba

Presented by: Wanda Phillips-Beck

All Authors: *Taylor Morriseau1, Mabel Horton2, Sherry Copenace2, Matta Evaluardjuk-Palmer2, Tibetha Kemble3, Melanie Morris4, Doris Young2, Wayne Clark3, Wanda Phillips-Beck1*
Author Affiliations: *1First Nations Health and Social Secretariat of Manitoba, 2ACT Elders Advisory Council, 3University of Alberta, 4University of Manitoba*

Background and Objectives: The Accelerating Clinical Trials (ACT) Indigenous Health Committee and Elders Council was established in 2023 to enhance safety, inclusion, and equity for First Nations (FN), Métis, and Inuit participation in clinical trials. The FNs branch is led by the First Nations Health and Social Secretariat of Manitoba (FNHSSM) with three broad objectives to: 1) identify FNs health priorities for clinical trials; 2) establish FNs regional guidelines; and 3) identify potential demonstration projects.

Approach: FNHSSM is a recognized leader in First Nations health research and data sovereignty through strong data governance and community partnerships. Using culturally rooted research methods, our approach involves active and meaningful collaboration with FNs in Manitoba. We strive to uphold our inherent rights and sovereignty in research to address barriers and promote equitable participation in clinical trial research.

Results: The Indigenous Health Committee and Elders Council, guided by an approved Terms-of-Reference, established respectful engagement strategies to gather information on health research priorities and initiate discussions on principles for involving FNs in clinical trials. Following approval by the regional FNs research ethics board - the Health Information Research Governance Committee - we held facilitated discussions with FNs Health Directors representing all 63 FNs in Manitoba. This was followed by an online pilot survey that will undergo further refinement prior to distribution among FNs health centres, leadership, and healthcare providers. Results are expected by May 2024, laying a foundation for the co-creation of ethical guidelines for FNs in Manitoba that can be adapted to other FN groups across the country.

Conclusion: Outcomes of this work will fill a significant knowledge gap in relation to clinical trials for FNs in Manitoba, including the development of respectful practices to cultivate higher levels of safe engagement, and clinical trials that align with community priorities and Indigenous methodologies.

Analysis of nurses' career paths during the health crisis: Towards strategies to optimize nurse retention and quality of care

Presented by: Marie-Eve Poitras

All Authors: *Anaëlle Morin1, Christian Rochefort2, Alèxe Deom-Tardif1, Cloé Beaulieu1, Marie-Eve Perron1, Catherine Deschênes1, Véronique Lowry1, Vanessa Tremblay-Vaillancourt1, Marie-Eve Poitras1*
Author Affiliations: *1Department of Family Medicine and Emergency medicine, CRMUS Research Chair on Optimal Professional Practices in Primary Care, Université de Sherbrooke, Quebec, Canada and Centre Intégré Universitaire de Santé et de Services sociaux du Saguenay-Lac-St-Jean, Québec, Canada, 2École des sciences infirmières, Faculté de médecine et des sciences de la santé, UdeS ; Centre de recherche du CHUS, Sherbrooke; Centre de recherche Charles-Le Moyne, Longueuil*

Background and Objectives: The COVID-19 pandemic impacted people’s physical and psychological health and professional careers. Healthcare organizations were at the forefront as they had to deal with a significant movement of nursing staff in response to the health crisis. Our study aimed to describe nurses’ career paths during the pandemic and to identify the determinants that influenced their decision to persist on the same path or switch to a different one.

Approach: A mixed sequential explanatory study was conducted. Phase 1, a cross-sectional correlational descriptive study design with a web-based survey, was used to document nurses’ career paths during the COVID-19 pandemic. In Phase 2, with a sub-sample of Phase 1, we conducted a qualitative study using the experience mapping approach to map out the stages of nurses’ career paths, the impacts of the pandemic on them, and the determinants that influenced them. Descriptive analyses were carried out for quantitative data to describe each path. Qualitative data were analyzed iteratively along paths, deductively and inductively. Both data sources were integrated into recommendations.

Results: Phase 1: 1,419 nurses responded to the questionnaire among the 14,000 invited. The completion rate was 69%, and 86.8% were female. Five career paths emerged: 39.3% kept the same position, 20.6% voluntarily changed positions, 16.1% were reassigned against their will, 3.2% quit, and 2.6% returned to the public healthcare system. Phase 2: 74 interviews were conducted. Among nurses who voluntarily changed positions, the decision was motivated by career advancement and a desire to support the healthcare system or improve working conditions. Nurses who were reassigned against their will reported negative consequences on their physical and mental well-being. Nurses left the healthcare system for three main reasons: forestalling a life project, returning to the healthcare system via another modality and ceasing due to illness or disability.

Conclusion: This study found that organizational factors affected nurses' career paths the most. This study enriches the collective understanding of the movement of nurses and their determinants, which may help minimize nurse turnover and its negative impact in a similar crisis.

Co-creation of an accreditation program for patient-oriented research for Canadian healthcare institutions: a national online Delphi consensus study

Presented by: Marie-Eve Poitras & Vanessa Tremblay-Vaillancourt

All Authors: *Marie-Hélène Baron1, Rachael Bosma2, Marie-Dominique Poirier1, Annie LeBlanc3, Vanessa Tremblay-Vaillancourt1, Alèxe Deom Tardif1, Marie-Eve Poitras1*
Author Affiliations: *1Department of Family Medicine and Emergency Medicine, Université de Sherbrooke, Saguenay, Canada, 2Faculty of Dentistry, University of Toronto, Ontario, Canada, 3Department of Family Medicine and Emergency Medicine, Université Laval, Quebec, Canada*

Background and Objectives: The Canadian Institutes of Health Research's Patient-Oriented Research (POR) Strategy catalyzed the development of Canadian POR practices. Our team's previous Scoping Review observed gaps in scientific evidence describing optimal organizational POR practices and minimal understanding on how healthcare institutions should integrate them, adding responsibilities to research teams. Our objectives are to 1) target healthcare institutions' POR organizational barriers/facilitators and 2) obtain a DELPHI agreement concerning organizational indicators optimizing healthcare institution's POR practices.

Approach: A multiphase project including a participatory developmental study and a Delphi method. First, two World Café (n=4) series exploring views of current organizational facilitators/barriers and future organizational indicators guiding healthcare institution's integration of POR practices will be carried out in French and English. Each World Café will gather 20 patient partners or research team members remotely and across Canada. Second, a Delphi process will validate the proposed organizational indicators. The barriers/facilitators and validated indicators will then be used to inform the creation of a standardized accreditation guide and training cocreated with experts.

Results: The World Café's will identify organizational facilitators and barriers of integrating POR practices in healthcare institutions. A preliminary list of indicators viewed as essential to facilitate the integration of POR practices into healthcare institutions will be created. The DELPHI process will result in the validated organizational indicators being further used to create, with an expert committee including patient partners, a standardized accreditation for healthcare institutions integrating POR practices and a related training. The training and standardized accreditation guide addressed to healthcare institution's research team members and professional staff will be deployed to impact the integration of POR practices within these institutions positively.

Conclusion: This multiphase initiative will determine specific organizational indicators that will support and guide healthcare institutions to better integrate and modify their procedure in line with integrating optimal POR practices. The training will be accessible via PASSERELLE SPOR National Training Entity platform.

Workforce Solutions to Strengthen Team-Based Comprehensive Primary Care: National initiative to support primary care nurses

Presented by: Marie-Eve Poitras

All Authors*:* *Deanne Curnew1, Sheila Epp2, Robin D. Burry1, Suzanne Braithwaite3, Monica McGraw4, Treena Klassen5, Anaëlle Morin4, Dana Ryan1, Anne-Sophie Langlois4, Julia Lukewich1, Donna Bulman1, Crystal Vaughan1, Marie-Eve Poitras4, Mireille Guérin4*

Author Affiliations: *1Faculty of Nursing, Memorial University of Newfoundland, Newfoundland, Canada. , 2University of British Columbia Okanogan, School of Nursing, British Columbia, Canada. , 3Trent/Fleming School of nursing, Trent University, Ontario, Canada. , 4Department of Family Medicine and Emergency medicine, CRMUS Research Chair on Optimal Professional Practices in Primary Care, Université de Sherbrooke, Quebec, Canada and Centre Intégré Universitaire de Santé et de Services sociaux du Saguenay-Lac-St-Jean, Québec, Canada. , 5Palliser Care Network, Alberta, Canada.*

Background and Objectives: While Canada has invested heavily in restructuring primary healthcare, it remains essential to improve access to, coordination, and continuity of care. The role of Registered Nurses (RNs) within well-functioning primary care teams is critical to achieving continuity of care. The foundations of knowledge specific to primary care nursing practice are not taught as part of RNs curriculum. Objective: To develop a strong primary care workforce focusing on post-licensure education for RNs within collaborative care teams.

Approach: We designed a mixed-method study based on Knowledge-to-Action principles to co-create an educational program for Canadian RNs in primary care. In co-construction cycles, we prepared the educational program objectives and content and established a network of primary care nurses, facilitators, subject matter experts, nurse educators, health researchers, and patient partners to form a community of practice. We designed the developmental evaluation for the educational program assessment, supported by RE-AIM, Eco-Normalization theory, and the New World Kirkpatrick models, to assess the implementation process and intervention's effects on RNs and professional practices in primary care.

Results: At least 500 Canadians RNs will be educated through an online, asynchronous, bilingual educational program to support RNs in enacting PMH's model principles and Canadian competencies into their primary care practice. The educational program focuses on patient engagement and interprofessional collaboration. A community of practice for primary care will be established to support professionals and contribute to the collective knowledge of an educational program implementation nationwide. Qualitative and quantitative data collection will permit the documentation of the implementation of the educational program and its effect on learning and professional practices. Questionnaires will be used to gather data on the effects of the educational program on nursing practice. Interviews with primary care facilitators and managers will permit qualitative data to document the implementation process.

Conclusion: This project addresses a considerable gap in healthcare training in Canada, particularly for primary care nurse post-licensure education and will contribute to the advancement of the primary care nursing workforce by supporting a foundation for future development and implementation of continuing education opportunities.

Evaluation of the contribution of accompanying patients in the implementation of a new integrated and connected healthcare model to Enhance the Clinical Condition of Patients Throughout a Liver Transplant

Presented by: Marie-Pascale Pomey

All Authors*:* *Fernand Duford1, Marie-Pascale Pomey2, Catherine Vincent1, Nathalie Nadon2, Cécile Vialaron2, Jessie Perron2, Manuel J. Escalona2*
Author Affiliations: *1Département d'hépatologie, Centre hospitalier universitaire de Montréal (CHUM), Montreal, Quebec, Canada, 2Carrefour de l'Innovation, Centre de recherche du Centre hospitalier de l'Université de Montréal, Montreal, Quebec, Canada*

Background and Objectives: Proper management of patients waiting for liver transplantation (LT) is essential to ensure that patients are in the best possible physical and psychological condition before the procedure. The support of former patients, i.e. accompanying patients (AP), has been reported to improve patients' motivation and engagement in care. This study aims to evaluate the implementation of an innovative healthcare model featuring the inclusion of APs to enhance the clinical condition of patients throughout their LT experience.

Approach: A mixed longitudinal method was used to identify how APs are integrated into the clinical team, participate in the work, and contribute to the implementation of the care model. All APs encountered the patients monthly and documented each of the meetings in a logbook available to all medical personnel in the project. Expectations and experiences with the healthcare model and AP were evaluated by patients, professionals, managers, and APs using data collected during interviews, discussion groups, and questionnaires. The data collected in these interviews and focus groups were the subject of descriptive analysis from the themes identified.

Results: Five APs were recruited and, along with the clinical team, were trained on their roles and on how to work together. All the APs were trained in therapeutic education and motivational interviewing to support the patients throughout their treatment. To date, 15 patients waiting for an LT and 15 transplanted were recruited and appreciated the peer support (n=15;100%). They mostly appreciated their availability to answer their questions (n=30, 100%), their support to do their exercises (n=22; 73%), and their capacity to be a role model (n=30;100%). The professionals (n=12) mostly appreciated the APs expertise from their personal experiences (n=12; 100%) and their cohesion with the clinical team (n=10; 83.3%). The APs felt valued for their contributions and integrated into the team project (n=5;100%).

Conclusion: The involvement of APs in this new healthcare model of LT from the outset improves the detection and addresses the challenges associated with recruitment, accessibility, acceptability, and the comprehensibility of procedures enhancing the relevance and meaningfulness of implementation outcomes.

System-level impacts of patients gaining or losing a source of comprehensive primary care

Presented by: Kamila Premji

All Authors: *Michael Green1, Antoine St-Amant2, Eliot Frymire1, Leanda Godfrey2, Paul Nguyen3, Maria Mathews4, Jonathon Fitzsimon2, Richard Glazier5, Kamila Premji2, Lise Bjerre2, Sophie Turcotte2*
Author Affiliations: *1Queens University, 2University of Ottawa, 3ICES, 4Western University, 5University of Toronto*

Background and Objectives: With Ontario anticipating worsening family physician (FP) shortages, policymakers must plan for the health system effects associated with patients losing a FP, and understand the effects associated with gaining a FP as they work to improve primary care attachment. We will examine patients' emergency department (ED) use, hospitalizations, total health system costs, non-primary care costs, primary care costs, and preventive care pre- and post- gaining or losing a family physician.

Approach: We will focus on attachment to a primary care Patient Enrolment Model (PEM), as formal enrolment has previously been associated with improved continuity and comprehensiveness of primary care. Design: Retrospective cohort pre/post analysis using linked health administrative datasets at ICES. Setting: Ontario, Canada. Population: All registered Ontario adults who were rostered to or derostered from a PEM between 2009 and 2022. Subcohorts of those with at least 1 chronic condition will also be studied. Exposure: The loss or gain of PEM enrolment during the study period. Comparison: Outcomes for each patient in each cohort will be compared pre/post.

Results: This initial phase identified those who gained or lost PEM attachment during the study period and examined related temporal patterns. The monthly rate of gaining PEM attachment remained relatively stable throughout the study period, ranging mainly from 1.0% to 1.5% of the adult population. A decline to 0.6% was noted in April 2020, corresponding with the beginning of the pandemic. The monthly rate of losing attachment to a PEM also remained relatively stable, ranging from 0.25% to 0.5% throughout the study period. Between 2009 and 2015, there was a steady increase in the proportion of Ontario adults attached to a PEM, peaking at 77.1% in June of 2015. Thereafter, the proportion attached to a PEM declined, reaching 72.5% in December 2022.

Conclusion: The rates of gaining or losing PEM attachment remained relatively stable. However, the overall proportion of adults with PEM attachment declined after 2015, potentially reflecting population growth and policies limiting entry of physicians into certain PEMs. Next steps include evaluating system-level outcomes associated with gaining or losing PEM attachment.

Comparison of long-term healthcare use among adults with disabilities following hospitalization for COVID-19, influenza, and sepsis.

Presented by: Kieran Quinn

All Authors: *Fahad Razak1, 2, 3, 4, Angela Cheung2, 5, Amol Verma1, 2, 3, 4, 6, Susie Goulding7, Hannah Chung5, John Lapp8, Hilary Brown1, 5, 9, 10, Therese Stukel1, 5, Aisha Ahmed8, Samantha Lee5, Allan Detsky1, 2, 8, Yona Lunsky5, 11, 12, Chaim Bell1, 5, 8, Kieran Q*

Author Affiliations: *1Institute of Health Policy, Management, and Evaluation, University of Toronto, 2Department of Medicine, Temerty Faculty of Medicine, Toronto, Ontario, Canada, 3Li Ka Shing Knowledge Institute, Unity Health Toronto, Toronto, Ontario, Canada, 4Department of Medicine, St. Michael's Hospital, Toronto, Ontario, Canada, 5ICES, Toronto, Ontario, Canada, 6Temerty Centre for AI Research and Education in Medicine, Temerty Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada, 7COVID Long-Haulers Canada, 8Department of Medicine, Sinai Health and University Health Network, 9Department of Health & Society, University of Toronto Scarborough, Toronto, Ontario, Canada, 10Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada, 11Azrieli Adult Neurodevelopmental Centre, Centre for Addiction and Mental Health, Toronto, Ontario, Canada, 12Department of Psychiatry, Temerty Faculty of Medicine, Toronto, Ontario, Canada, 13Temmy Latner Centre for Palliative Care, Sinai Health System, University of Toronto*

Background and Objectives: People with disabilities are at elevated risk of adverse short-term clinical outcomes following hospitalization for acute infectious illness yet no prior studies have compared long-term healthcare use following hospitalization for acute infectious illnesses. To inform health resource planning, we compared the healthcare use of adults with disabilities in the 1-year following hospitalization for COVID-19 against 3 comparator groups: hospitalization for sepsis during the COVID-19 pandemic, and pre-pandemic hospitalization for sepsis and influenza.

Approach: We conducted a population-based cohort study of adults with disabilities hospitalized for COVID-19 (n=22,551) and sepsis (n=11,669) between January 25, 2020, and February 28, 2022, and historical comparator groups of adults with disabilities hospitalized for influenza (n=11,216) and sepsis (n=49,326) between January 1, 2014 and March 25, 2019 in Ontario, Canada. We calculated rates per 100 person-months of follow-up and used propensity-overlap weighting with Poisson and Cox proportional hazards regression to measure the associated rate and hazard ratios (RR, HR) between hospitalization for COVID-19 and ambulatory care visits, ambulatory diagnostic testing, emergency department visits, hospitalization, palliative care visits and death.

Results: Within 1-year of discharge, COVID-19 was not associated with greater rates of healthcare use for ambulatory care visits (RR 0.88, 95%CI, 0.87-0.90), diagnostic testing (RR 0.86, 95%CI, 0.84-0.89), emergency department visits (RR 0.91, 95%CI, 0.84-0.97), hospitalization (RR 0.74, 95%CI, 0.71-0.77), palliative care visits (RR 0.71, 95%CI, 0.62-0.81) or death (HR 0.71, 95% 0.68-0.75), compared to the primary contemporary comparator group of people hospitalized with sepsis during the COVID-19 pandemic. Similar trends were observed for the secondary historical comparator groups of people hospitalized for sepsis and influenza, except for ambulatory care visits (RR 1.09, 95%CI, 1.06-1.11), palliative care visits (RR 1.26, 95%CI, 1.10-1.43) and mortality (HR 1.17, 95%CI 1.08-1.27) vs. people hospitalized for influenza.

Conclusion: Adults with disabilities hospitalized for COVID-19 did not have greater rates of healthcare use or mortality in the 1-year post-discharge vs. those hospitalized with sepsis or influenza. These findings can help inform long-term health resource planning that prioritizes the needs of people with disabilities regardless of the reason for hospitalization.

Immunity from prior infection protects against Omicron BA.5 in retirement and long-term care home residents.

Presented by: Ahma Rahim

All Authors: *Tara Kajak1, Ahmad Rahim1, Andrew Costa1, Jessica Breznik1, Dawn Bowdish1, Chris Verschoor2*
Author Affiliations: *1McMaster University, 2Northern Ontario School of Medicine University*

Background and Objectives: We have previously reported in long-term care residents that recent infection and vaccination protects against Omicron BA.1/2 infection but not in the first wave of Omicron BA.5 infection, prior to when bivalent vaccines were available. However, it remains unclear whether prior infection(s) decreased the risk of infections in the second wave of Omicron BA.5 (i.e. Fall 2022) and if serum and neutralizing antibody levels mediated this relationship.

Approach: In this retrospective cohort study, we examined the incidence of COVID-19 during the second wave of Omicron BA.5 SARS-CoV-2 infections in 362 vaccinated long-term care and retirement home residents that participated in the COVID in Long-Term Care Study in Ontario, Canada, and had a blood draw between September 14, 2022, and December 31, 2022. SARS-CoV-2 infections were determined by PCR test. We explored the mediating effects of serum and neutralizing antibody levels using marginal structural models.

Results: 25 study participants (6.8%) had a PCR-confirmed Omicron infection in the second wave of Omicron BA.5 infections. History of previous infection(s) was associated with lower Omicron BA.5 infection rate (HR: 0.11, 95% CI: 0.02-0.61). There was no evidence that these associations were mediated through serum and neutralizing antibody levels.

Conclusion: Previous infections decreased the risk of Omicron BA.5 infection in the fall 2022 wave in residents of long-term care and retirement homes. Higher serum antibody levels and neutralizing antibody levels were observed in individuals with prior infection(s), but more studies are needed to establish the mechanism(s) that mediate this relationship

Care aides compassion fatigue, burnout, and compassion satisfaction related to the working environment in LTC homes in Alberta during COVID-19

Presented by: Ashikur Rahman

All Authors: *Ashikur Rahman1, Carole A. Estabrooks1, Yinfei Duan1*
Author Affiliations: *1University of Alberta*

Background and Objectives: Severe staff shortages, sustained stress, low compassion satisfaction, high compassion fatigue, and serious levels of burnout among the health care workers are frequently reported during COVID-19. Limited research has examined compassion-related work life among LTC care aides facing high-stress situations due to the deaths of residents and colleagues during COVID-19. We aimed to examine the relationships between compassion fatigue, burnout, and compassion satisfaction with the working environments in LTC homes during COVID-19 in Alberta.

Approach: We conducted a cross-sectional study with 760 care aides working in a stratified random sample of 28 LTC homes in Alberta between August 2021 and February 2022. The Alberta Context Tools (ACT) and Professional Quality of Life-9 items (ProQOL-9) were used to measure the working environment and care aide's compassion fatigue, burnout, and compassion satisfaction, respectively. A two-level multilevel regression was used to assess the relationship between care aides' burnout, compassion fatigue, and compassion satisfaction with factors of the working environment.

Results: Care aides in smaller facilities reported higher levels of compassion fatigue (B = 0.764, p = 0.008) compared to those in larger facilities. Higher compassion satisfaction (B = 1.009, p = <0.001) and lower burnout (B = -0.909, p = <0.001) were observed when care aides felt a more supportive working culture, including recognition of their work, supportive teamwork, and professional developmental opportunities in LTC homes. Care aides reported higher compassion fatigue when there was a lack of structural (B= -0.149, p =0.019) or staffing resources (B= -0.253, p = 0.007). We also found that not having enough staff (B = -0.469, p = <0.001) or enough time (B = -0.337, p= 0.019) to complete tasks was significantly associated with care aides feeling more burnout.

Conclusion: Compassion fatigue and burnout among care aides are associated with some modifiable factors in the working environment. These findings offer some direction about which elements of the working environment may be more promising to focus improvement efforts on. A better work environment is likely to be characterized by lower turnover.

Barriers and Facilitators to Implementing OurNotes in Canadian Mental Health Settings: A Qualitative Study

Presented by: Karishini Ramamoorthi

All Authors: *Brian Lo1, 2, Iman Kassam1, 2, Gillian Strudwick1, 2, Karishini Ramamoorthi1, 2*
Author Affiliations: *1Campbell Family Mental Health Research Institute, Centre for Addiction and Mental Health, 2Institute for Health Policy, Management, and Evaluation, University of Toronto*

Background and Objectives: The OurNotes movement advocates for patient engagement in their care by asking patients to comment on their health progress or to prioritize topics for discussion ahead of their clinical appointment through an electronic pre-visit note. To date, OurNotes has primarily been implemented in primary and acute care settings. While its reception has largely been positive from the perspectives of patients and clinicians, its use in mental health settings or within Canada has been limited.

Approach: A qualitative descriptive approach was used to guide this study. Semi-structured interviews were conducted with 1) patients receiving mental health care, 2) care partners who have supported someone with a mental health condition, and 3) direct care mental health clinicians. The interview guide was co-developed with a lived experience advisor and interviews were conducted by project members with backgrounds in health informatics, patient engagement and mixed-methods research. Field notes were captured during the interview, and thematic data analysis was used to identify barriers and facilitators to implementing OurNotes in mental health settings.

Results: Overall, 14 mental health clinicians and 12 patients/care partners participated in the study. Through the interviews, 5 major implementation themes were identified. Specifically, the discussions centered around the design, structure and usability of pre-visit notes, the positive impact of pre-visit notes on care quality, concerns for equity and accessibility when implementing pre-visit notes, feasibility of integrating pre-visit notes into workflows, and the impact to patient-clinician relationships. Participants underscored the importance of co-designing the pre-visit notes with patients and clinicians to ensure that the design, structure and format align with their needs. Moreover, participants unanimously saw benefit to incorporating pre-visit notes into care, stating it could improve care quality, efficiency and the therapeutic alliance.

Conclusion: This is one of the first studies to explore perceptions, needs and challenges to adopting OurNotes into Canadian mental health settings. It serves as a model to improve patient engagement and satisfaction. The barriers and facilitators identified can provide guidance for mental health organizations considering the implementation of OurNotes.

Breaking Barriers: Enhancing Prenatal and Postpartum Mental Health Support for South Asian Women from the Greater Toronto Area

Presented by: Tanveer Randhawa

All Authors: *Kanika Sarwal1, Alyssa Madhani1, Tanveer Randhawa1, Jothi Khaira1*
Author Affiliations: *1University of Waterloo*

Background and Objectives: The proposed study aims to investigate the need for support and education in prenatal and postpartum mental health and the influences of cultural barriers on existing stigmas, with a specific focus on female-identifying individuals within the South Asian population in the Greater Toronto Area (GTA). The study seeks to explore the effectiveness of integrating prenatal and postpartum education into primary care classes to increase healthcare literacy, especially among immigrant populations within low to mid-socioeconomic classes.

Approach: This qualitative study employs in-depth interviews and focus groups to investigate the need for enhanced prenatal and postpartum mental health support within the South Asian population. Utilizing purposive sampling to ensure diverse representation, participants will be recruited from EarlyON Centers throughout the GTA that offer inquiry-based programming for relationship development between parents and children from birth to 6 years of age. Thematic analysis will uncover insights into experiences, perceptions, and needs. The study will assess existing provincial educational policies to propose recommendations for improvement. Ethical considerations, stakeholder engagement, and collaboration with healthcare providers and policymakers will ensure a comprehensive exploration.

Results: Anticipated outcomes include a nuanced understanding of the unique challenges faced by the South Asian population, immigrants, and individuals from low to mid-socioeconomic classes during the prenatal and postpartum periods within the GTA. The research aims to identify gaps in current policies related to mental health support, shedding light on specific needs and barriers related to language and cultural stigma. Findings are expected to inform recommendations for integrating comprehensive prenatal and postpartum mental health education into primary care classes. By bridging these gaps, the study aims to enhance healthcare literacy in the targeted population and holds the potential to influence policy development and improve mental health outcomes and overall well-being for expectant and postpartum individuals belonging to diverse and vulnerable communities in the GTA.

Conclusion: In conclusion, this study illuminates the need for prenatal and postpartum support within the South Asian population in the GTA. Anticipated outcomes aim to inform policy changes, recommending the integration of education into primary care classes. The study aims to improve mental health outcomes and health literacy for vulnerable communities.

Hidden in Plain Sight: Access Barriers for Young Adults with Mental Health-Related Disability

Presented by: Sandy Rao

All Authors: *Sandy Rao1, Gina Dimitropoulos1, Scott Patten1*
Author Affiliations: *1University of Calgary*

Background and Objectives: Over 2 million Canadians have a mental health-related disability (MHD), defined as limitations in daily activities resulting from mental illness, and over 1 million require healthcare services. However, less than 20 percent receive appropriate treatment. Untreated mental illnesses have a high recurrence rate, often become chronic, and are associated with worse health and life outcomes, profoundly the overall disease burden. Objectives: This patient-oriented mixed methods study examines the relationship between young adults' MHD and access.

Approach: The initial quantitative phase will use national data to identify factors that may present barriers to access for young adults (YA). Then, we will determine which are associated with increased barriers due to MHD. Next, interviews will be conducted with 8-12 YA with mental illness. YA patient research partners (PRP) will also be recruited. Quantitative results will be presented to PRP, who will assist in co-designing the interview guide. Semi-structured interviews will be audio-recorded, transcribed and analyzed using reflexive thematic analysis. Integration will occur using themes-by-statistics joint display to provide a deeper understanding of access barriers for YA with MHD.

Results: Our study expects to uncover significant correlations between functional impairments in communication, understanding, interpersonal relationships, societal participation, and diagnosis types with barriers to healthcare access for YA with MHD. We predict these barriers will be compounded when intersecting with determinants of health—such as food security and living arrangements, gender, and sexual identity, potentially doubling or tripling the challenges faced in accessing healthcare services. Additionally, we anticipate revealing that YA with MHD often experience iatrogenic effects, defined as adverse conditions induced by the healthcare system, where attempting to navigate and access the mental healthcare system inadvertently exacerbates YA difficulties, resulting in greater barriers to obtaining appropriate healthcare services, further complicating their journey towards wellness and effective healthcare treatments.

Conclusion: YA with MHD are overlooked as their conditions are unobservable, highly stigmatized, tend to fluctuate, and may have an indirect relationship to functional status. The study results will provide guidelines for universal design for healthcare access and policy and practice regulations that extend the functioning of YA with mental illness.

Acceptability and feasibility of storytelling with patients, family caregivers, and healthcare providers in an inpatient palliative care unit

Presented by: Jaya Rastogi

All Authors: *Cory Ingram1, Jaya Rastogi2, Sarina Isenberg2, 3, Carol Wiebe4, Claudia Hampel5, Kaitlyn Boese6, 7, Shirley Bush2, Kim Kilpatrick8, Regine Krechowicz3, Jessica Roy2, Jenny McMaster4*
Author Affiliations: *1Mayo Clinic, 2Bruyere Research Institute, 3University of Ottawa, 4Radical Connections, 5Caregiver Advisor, 6McMaster University, 7St. Joseph's Hospital, 8Professional Storyteller*

Background and Objectives: Storytelling has helped patients in palliative care units (PCUs), including those with a life-limiting illness, a prognosis of less than 3 months, or complex symptom needs, to share lived experiences and explore difficult emotions. It has validated feelings for family caregivers and promoted self-care for healthcare providers (HCPs). Limited research has explored best practices of storytelling. We used a multi-method approach to test proof of concept, feasibility, and acceptability of storytelling on our PCU.

Approach: This study incorporated expertise from our interdisciplinary team of clinicians, caregivers, researchers, and artists. Patients, family caregivers, and healthcare providers participated in storytelling sessions on the Bruyère PCU in Ottawa, ON. A professional storyteller worked with participants to create a short story on a topic of the participant's choice. Quantitative evaluation involved participants completing an online post-survey on perceived usefulness and ease of participation in the storytelling exercise. Qualitative evaluation consisted of an exit interview with the storyteller. Analysis included descriptive statistics of survey results, content analysis of the stories, and thematic analysis of the exit interview and field notes.

Results: Six patients, six caregivers, and seven HCPs participated in storytelling sessions, and recruitment is ongoing. While most individuals participated solo, two dyad sessions were completed with patients and caregivers. HCP participants included physicians and allied health professionals including spiritual care, occupational therapy, and clinical management. All participants (n=19) either agreed or completely agreed that the storytelling experience was acceptable, feasible, and meaningful. Caregivers' stories often reflected on the life of the person receiving care in the PCU. Both patients and caregivers expressed appreciation for the PCU staff, and many told stories highlighting the impact of staff, from physicians to housekeeping. Staff emphasized the importance of having allied health professionals on the unit to meet the holistic needs of patients. The storyteller exit interview is forthcoming.

Conclusion: Storytelling is a feasible and acceptable PCU initiative, which creates the foundation for an effectiveness study to explore storytelling as a tool to navigate difficult emotions, support legacy work, and promote self-care. Future research should explore storytelling in additional care settings, like long-term complex care, transitional care, and community care.

Gathering perspectives on considerations for a jurisdiction-level actionable resource allocation framework for the use of triage and triage-avoidant strategies.

Presented by: Jaya Rastogi

All Authors: *Cecile Bensimon1, Simon Oczkowski2, Sarina Isenberg3, 4, Alice Virani5, James Downar4, Peter Tanuseputro6, Marika Warren7, Maxwell Smith8, Dianne Godkin9, Jaya Rastogi3, Taylor Shorting3*

Author Affiliations: *1CHEO Research Institute, 2McMaster University , 3Bruyere Research Institute, 4University of Ottawa, 5Provincial Health Services Authority of BC, 6N/A, 7Dalhousie University, 8Western University, 9Trillium Health Partners*

Background and Objectives: Amidst the COVID-19 pandemic, healthcare systems struggled to meet critical care demands. Most jurisdictions implemented strategies (e.g., cancelling non-emergent surgery, rerouting patients to other regions) to avoid triage and related harms. However, these triage-avoidant strategies caused unintended consequences for patients, families, healthcare organizations, and particularly for marginalized individuals. While resource allocation frameworks were developed to include principles of non-discrimination, equity, and autonomy, more research is required to better incorporate these concepts into an actionable framework.

Approach: We gathered perspectives on considerations for a resource allocation framework to optimize outcomes and mitigate the disproportionate effects of future demand surges upon marginalized populations within intensive care units (ICUs) and acute care. We conducted focus groups across Canada with racialized individuals, persons with disabilities or illness, healthcare, and government. Participants shared impacts of triage-avoidant strategies on their community and offered suggestions for allocating limited ICU resources. We are analyzing the transcripts to develop key considerations for a framework to guide the use of triage and triage-avoidant strategies during times of overwhelming demand for critical care in Canada.

Results: Participants from across Canada (n=23) included individuals from the aforementioned groups who fulfilled the following roles: decision-makers, advocacy group representatives, physicians, and ethicists. Themes included: the importance of meaningfully consulting marginalized groups when developing and implementing frameworks; the disproportionate negative health impacts of relocating patients and cancelling or postponing specialist treatment, non-emergent surgery, and ICU recovery-requiring surgery; and the importance of a collaboratively developed triage protocol if triage-avoidant strategies are insufficient and/or lead to unintended consequences. Participants also discussed how histories of and continued systemic discrimination and mistrust of the healthcare system shaped their healthcare experiences during the pandemic; several felt that triage avoidant strategies reinforced these structural barriers.

Conclusion: Findings suggest additional considerations that should be incorporated into decisions about resource allocation, including the use of both triage and triage-avoidant strategies.

Comparing Post-Operative Inpatient Opioid Use with Discharge Opioid Prescribing Patterns in Adult Patients Undergoing Total Hip and Knee Arthroplasty - A Retrospective Observational Study

Presented by: M Faisal Rauf

All Authors: *Venita Harris1, Feng Chang2, Adriana Too3, M Faisal Rauf2*
Author Affiliations: *1London Health Sciences Centre, 2university of Waterloo, 3St. Joseph HealthCare London*

Background and Objectives: The opioid crisis in Canada has been a major cause of hospitalizations and deaths. Excessive opioid prescriptions were also responsible for this crisis. Post-surgical opioid use was associated with higher opioid doses that led to an increased risk of adverse effects and chronic use. There are no national guidelines available for discharge prescribing.
To compare post-surgical inpatient opioid use before discharge with discharge opioid prescribing patterns in patients who underwent THA or TKA.

Approach: In this retrospective study, opioid naïve adult patients were included from the LHSC University Hospital who underwent THA or TKA from January 2022 to December 2022. Patients were excluded if they had cancer, chronic kidney disease, substance use disorder, peripheral nerve infusion within the last 24 hours before discharge or if they were discharged from another service. Data collected include the patient's age, sex, BMI, type of surgery, opioid medications and doses used in the last 24 hours before discharge, opioid medications, doses, and quantities prescribed at discharge. All opioid doses were converted into morphine-equivalent doses for analytical purposes.

Results: Data from 300 patients were analyzed for this study. There was a significant difference between opioid doses used before discharge when compared to opioid doses prescribed at discharge. The prescribed discharge doses were almost twice the pre-discharge doses the patients used.3 There were 96.9% of patients who did not use any opioids in the last 24 hours before discharge. Nonetheless, they were prescribed opioids at discharge. Opioid dose was significantly associated with secondary variables of age and pain, whereas sex and BMI were not significantly related.

Conclusion: High doses of opioids are often prescribed after Total Knee Arthroplasty (TKA) and Total Hip Arthroplasty (THA), increasing the risk of opioid-related harms. To minimize risks and provide effective pain control, patient-centred prescribing guidelines should be established.

Economics of Mental Health Among International University Students during the COVID?19: A Qualitative Study

Presented by: Aastha Raval

All Authors: *Asif Khowaja1, Monique Brown1, Aastha Raval1*
Author Affiliations: *1Brock University*

Background and Objectives: Emerging evidence indicates the unintended consequences of COVID-19 on all age groups, however data on the economics of mental health among university students are scarce. This study addressed two research questions: (i) What are the perceived financial constraints for students? (ii) how do emotional/mental health stressors influence students' financial standing during the pandemic?

Approach: A qualitative explorative study was conducted from October to December 2022. The data were primarily collected using semi-structured interviews with undergraduate international students at Brock University. Participants were recruited through a snowball sampling technique for virtual interviews conducted over MS Teams. Thematic analysis was applied to interpret themes and subthemes.

Results: Thirteen interviews were conducted. Almost all study participants preferred to remain in Canada during the pandemic and did not feel safe travelling back home. According to the participants, school or business closures negatively impacted their ability to earn and socialize resulting in a relatively higher toll on their mental health. They perceived financial hardships to further aggravate their mental health and vice-versa. A vast majority of participants revealed a lack of financial support from government agencies and diminishing monetary support from families abroad due to the global economic crisis. Furthermore, inadequate job-training opportunities and restricted access to mental health services poorly affected job attainment and survival in a foreign country during the pandemic.

Conclusion: This study highlights the interconnectedness of financial and mental health consequences. More research is needed to explore risk mitigation and support strategies among international university students in Canada.

Differences in Aspirin Use Among High-Risk Pregnancies and Associated Maternal-Fetal Outcomes - a retrospective cohort study.

Presented by: Leonet Reid

All Authors: *Hilary Brown 1, 2, Leonet Reid1, 3, John Kingdom1, 4, Valeria Rac1, 3, Kelsey McLaughlin1, 4, John Snelgrove 1, 4*
Author Affiliations: *1University of Toronto , 2Women's College Hospital , 3University Health Network , 4Mount Sinai Hospital*

Background and Objectives: Annually, pre-eclampsia affects 1 in 20 pregnancies in Canada and adds 3.1 million dollars to healthcare costs due to its wide-ranging maternal-fetal complications. Screening and predicting the severity of PE have proven to be complex and as a result, the use of aspirin prophylaxis has been underutilized due to structural and procedural barriers that affect patient outcomes. This research identifies the patterns of use of aspirin and the associated maternal-fetal outcomes among high-risk pregnant patients.

Approach: A constructive post-positivist and transformative epistemological approach was employed in conducting this retrospective cohort study of 641 high-risk pregnant individuals. Descriptive and explorative analysis was done to describe patterns of prophylactic aspirin use based on maternal characteristics and associated maternal-fetal outcomes. Logistic regression was employed to estimate which factors are associated with increased odds of not receiving ASA among patients at high risk of pre-eclampsia and estimate the odds of ASA non-use by combined and cumulative risk factors. A STROBE and Donabedian framework were used to triangulate and discuss the positionality of the results.

Results: The results revealed that only 34% of the sample population had a documented history of aspirin usage, and 45% in the high-risk group for whom aspirin was indicated. Furthermore, the common aspirin dosage was 81 mg/day, whereas a higher dosage of >100 mg/day was reported to have higher efficacy rates in preventing preterm pre-eclampsia. The study also found that one-third of individuals with previous pre-eclampsia had no aspirin usage while the rates and odds of non-use decreased as the number of risk factors increased. Finally, a trend toward significance was noted in the difference in the incidence of early-onset PE and significant differences in the incidence rates of preterm births occurring between >28 - <37 weeks of gestation between aspirin users and non-users.

Conclusion: The study underscores the underutilization of aspirin prophylaxis in high-risk pregnancies, with only 34% receiving it despite clear indications. The reduced rates of preterm births reveal the potential benefits of aspirin to patients and health systems. The findings emphasize the need for optimized aspirin utilization to mitigate adverse maternal-fetal outcomes.

Mental health of children with special health needs in Manitoba, Canada

Presented by: Caroline Reid-Westoby

All Authors: *Magdalena Janus1, Nathan Nickel2, 3, Gilles Detillieux2, Jennifer Enns2, Caroline Reid-Westoby1, Marni Brownell2, 3*
Author Affiliations: *1Offord Centre for Child Studies, McMaster University, 2Manitoba Centre for Health Policy, 3University of Manitoba*

Background and Objectives: An estimated 15-22% of children starting school have a special health need (SHN), defined as having a clinical diagnosis, a functional need requiring special accommodation at school, or a health condition leading to increased needs. Evidence suggests that children with SHN may be more likely to experience mental disorders compared to their peers without SHN. The overall aim of this study was to establish and contextualize the risk of mental disorders among children with SHN.

Approach: The study linked data from the Early Development Instrument (EDI), a population-level, teacher-completed questionnaire of children's developmental health in kindergarten, collected in Manitoba between 2006 and 2015 with provincial health administrative data up to 2019. Using binary logistic regressions, we examined the odds of receiving a diagnosis of any mental disorder, by the various categories of SHN: special needs, impairments in physical, vision/hearing, learning, speech, behaviour, and emotions, needing further assessment, and having two or more SHN categories.

Results: A total of 37,265 children with complete EDI data were linked to health administrative data, of which 36,462 (97.85%) were considered valid for analysis. Of these children, 5,882 (16.13%) were identified as having an SHN in kindergarten. Results indicated that the odds of developing a mental disorder depended on the subtype of SHN identified in kindergarten. Children needing further assessment, those with special needs, those with 2+ SHN categories, and those with a learning, behavioural, or emotional impairment had between 1.35 and 3.27 times the odds of receiving a mental health diagnosis than their peers without these issues. Having a behavioural impairment increased a child's odds the most. Having a physical, visual, or hearing impairment did not increase one's odds of a mental disorder.

Conclusion: Findings indicate that a special needs designation and impairments in behaviour and emotions are important kindergarten predictors of a future mental disorder in children living in Manitoba. This study will help create preventive and supportive strategies for children with SHN and help generate wider mental health supports in schools.

Co-Development of a Learning Health System for Ontario Health Teams: Applying User-Centered Design to Optimize Audit and Feedback

Presented by: Victor Rentes

All Authors*: Paul Wankah1, Walter Wodchis2, Victor Rentes2*
Author Affiliations: *1McGill University , 2IHPME/HSPN - University of Toronto*

Background and Objectives: To support population health management for Ontario Health Teams (OHTs), the Health System Performance Network (HSPN) established an Audit and Feedback (A&F) program that leverages administrative datasets and survey data to monitor a broad range of patient, provider, and system-level outcomes. On a regular basis, HSPN provides comparative performance feedback to OHT representatives. However, it is uncertain how HSPN indicator reports are interpreted and used and what opportunities there are to optimize actionability of feedback.

Approach: This research is a multiple case study of 6 OHTs across 3 different attributed population sizes: a) less than 100,000, b) between 100,000 and 400,000, and c) 400,000 and above. Semi-structured interviews will be conducted (n=18 across the 6 OHTs) with key OHT stakeholders responsible for providing data to managers (i.e., executive directors, working group leads, and data analysts/evaluation leads). The interviews will ask specific questions about how participants perceive data visualizations and interpretations within the indicator reports. We will use rapid qualitative analysis methods to review interview transcripts and highlight emerging themes that will inform improvements to future reporting.

Results: Interviews are planned to occur in March, rapid analysis will be performed in April, and findings will be synthesized by May, 2024. The interview guide is grounded on the Learning Health System (LHS) framework, and explores the following topics across 3 domains: 1) Practice to Data: indicator selection and data quality, 2) Data to Knowledge: understandability and actionably of data visualizations and interpretations, and effectiveness of feedback delivery modalities and messengers, and 3) Knowledge to Practice: implementation barriers within OHTs. Topics explored in the interviews will be used to guide deductive thematic analysis and new themes that emerge will be identified using an inductive approach. Three researchers familiar with the OHT program will review and synthesize findings for consistency and agreement on theme extraction.

Conclusion: As part of an ongoing effort by HSPN to continuously improve how evaluation and feedback are conducted to support OHTs, this study applies user-centered design to optimize an A&F program and, ultimately, foster the co-development of an LHS for improved value to stakeholders across Ontario.

Enablers and barriers for the prescribing and administering of end-of-life symptom relief medications in long-term care homes - a qualitative study

Presented by: Rhiannon Roberts

All Authors: *Colleen Webber1, 2, Kaitlyn Boese1, 3, James Downar1, 2, 3, Christina Milani2, Jessica E Simon4, Rhiannon Roberts1, Amit Arya5, 6, Sarina R Isenberg2, 3, 5, 7, Peter Tanuseputro1, 2, 3, Shirley H Bush1, 2, 3*
Author Affiliations: *1Ottawa Hospital Research Institute, 2Bruyère Research Institute, 3Department of Medicine, Division of Palliative Care, University of Ottawa, 4Department of Oncology, Medicine and Community Health Sciences, Cumming School of Medicine, University of Calgary, 5Department of Family and Community Medicine, University of Toronto, 6Kensington Research Institute, 7School of Epidemiology and Public Health, Faculty of Medicine, University of Ottawa*

Background and Objectives: Long-term care (LTC) homes provide personal and medical care 24/7 to individuals unable to live in the community and are often the final place of care and death for older adults. Therefore, LTC homes must provide quality end-of-life care, including the use of end-of-life symptom relief medications to relieve distressing symptoms (e.g., pain). We aimed to understand the enablers and barriers to the prescription and administration of end-of-life symptom relief medications in Ontario's LTC homes.

Approach: Sampling and recruitment: We recruited healthcare providers (physicians and nurses) who worked in Ontario LTC homes and family caregivers of individuals who died in LTC during the COVID-19 pandemic to participate in semi-structured qualitative interviews (recruitment period February 2021 to December 2022). Interview questions aimed to examine experiences with prescribing and administering end-of-life symptom management medications.
Analysis: Interviews were recorded and transcribed verbatim. We employed a thematic analysis approach to identify emergent themes. We used group, consensus, and double coding to establish inter-coder reliability.

Results: We identified four themes related to factors that may impact the prescription and administration of medications for end-of-life symptom relief. Each of these themes can enable or prevent the end-of-life medications prescribing or administering. First, identifying the end-of-life period and symptoms can be challenging, especially for newer staff. Second, communication among healthcare providers, and between healthcare providers and family caregivers is critical to medication prescribing or administration. Nurses and family caregivers often detect end-of-life symptoms and advocate for medications. Third, healthcare provider comfort with end-of-life medications is a large barrier, as nurses are not always comfortable administering medications. Forth, is that resources (e.g., end-of-life order sets, training, mentoring) can help LTC staff through prescribing or administering end-of-life symptom management medications.

Conclusion: In LTC, there are distinct challenges in the prescribing and administrating of end-of-life symptom management medications. Our findings can be used to inform interventions aimed at improving end-of-life care for LTC residents. However, these interventions require buy-in and investment from the provincial government and the LTC sector.

Sex differences in health service use for persons with dementia between 2018 and 2020 in four Canadian provinces

Presented by: Maria Alejandra Rodriguez Duarte

All Authors: *Geneviève Arsenault-Lapierre1, 2, Ilhem Chaima Bousbiat1, Laura McLagan3, Claire Goddard-Sebillotte4, Covid Rosa team1, Isabelle Vedel1, Deniz Cetin Sahin1, Susan Bronskill3, Nadiax Sourial5, maria alejandra rodriguez1*
Author Affiliations: *1Department of family medicine, Mcgill University, 2Center for Research and Expertise in Social Gerontology, 3Institute for Clinical Evaluative Sciences, 4Department of Medicine, Faculty of Medicine and Health Sciences, McGill University, 5Department of Health Management, Evaluation and Policy, University of Montreal*

Background and Objectives: Ensuring equitable and tailored healthcare services for persons with dementia is of utmost importance, given recent evidence indicating sex-based disparities in healthcare use among this population. However, this evidence predates the COVID-19 pandemic, which has further magnified disparities, and is based on data from limited geographic regions. This study aims to examine ambulatory and acute care service use between men and women with dementia before and during the COVID-19 pandemic in four Canadian provinces.

Approach: A retrospective multicohort design was conducted using health administrative data from Quebec, Ontario, British Columbia, and Saskatchewan. The population was community-dwelling individuals aged 65 and older with a diagnosis of dementia by March 1st of 2018, 2019, or 2020. A random-effect meta-analysis was conducted with sex-stratified outcomes of ambulatory and acute care: family physician visits, cognitive specialists' visits, other specialists' visits, emergency department visits, and all-cause hospitalizations. The incidence rate difference for each cohort year (IRD per 100 person-weeks) was estimated for each outcome.

Results: The study included 201,313 women and 155,672 men. FP, CS, and other specialist visits remained stable for men and women over the years. Women had consistently higher family physician visits than men (IRD2018= -1.27, IRD2019= -1.11, IRD2020= -1.14). Men had more cognitive specialist visits (IRD2018 = 0.26, IRD2019 = 0.35, IRD2020=0.45), and other specialists' visits (IRD2018= 0.69, IRD2019= 0.57, IRD2020= 0.63). ED visits and hospitalizations for both men and women showed an increase from 2018 to 2019, followed by a decrease in 2020. However, men had consistently higher Emergency department visits (IRD2018= 0.17, IRD2019= 0.18, IRD2020= 0.14). and higher hospitalizations (IRD2018 = 0.10, IRD2019= 0.14, IRD2020= 0.11) than women.

Conclusion: Consistent sex differences in healthcare use for persons with dementia are observed before and during the pandemic. This enhances the need to address sex-based disparities in dementia care, ultimately working toward ensuring equitable and tailored healthcare services to enhance the quality of care and experiences for all persons with dementia.

Exploration des pratiques de collaboration interprofessionnelle dans la gestion des parcours de soins interétablissements en santé musculosquelettique pédiatrique

Presented by: Liset Rodriguez-Ojea

All Authors: *Janet Rennick1, Aurélie Vigné2, Marie Beauséjour3, Liset Rodriguez-Ojea3, Lynda Benhadj3, Stefan Parent4, Julie Letendre2, Kelly Thorstad5, Stéphanie Gould2, Isabelle Gaboury3, Camille Brosseau2, Martin Sasseville3, Argerie Tsimicalis5*
Author Affiliations: *1Hôpital de Montréal pour enfants, 2Initiative MUSCO, 3Université de Sherbrooke, 4CHU Sainte-Justine, 5Hôpitaux Shriners pour enfants - Canada*

Background and Objectives: La prise en charge périopératoire des patients pédiatriques présentant des troubles musculosquelettiques nécessite la coordination de multiples intervenants, et ce, de différents services et établissements. La collaboration interprofessionnelle (CIP) est une des clés pour améliorer les enjeux de fragmentation des soins auxquels ces patients sont confrontés dans leur parcours interétablissements. Nous proposons : 1) d'explorer les perceptions sur la CIP des personnes impliquées dans ces parcours; 2) d'identifier les facteurs facilitant et contraignant la CIP.

Approach: Une analyse qualitative descriptive interprétative a été utilisée. La stratégie d'échantillonnage intentionnelle a permis de cibler 18 participants impliqués dans les transferts de jeunes patients, appartenant à quatre établissements de santé de Montréal. Entre septembre et novembre 2022, trois groupes de discussion focalisée et trois entretiens individuels ont été effectués. Le guide d'entretien et l'analyse sont fondés sur le cadre de la collaboration interprofessionnelle et inter-organisationnelle de D'Amour et al. 2008. Le cadre décrit deux dimensions qui impliquent des relations entre les individus (internalisation et objectifs partagés) et deux relatives à l'environnement organisationnel (gouvernance et formalisation).

Results: L'exploration de la gouvernance a fait ressortir l'importance du nouveau rôle de coordonnatrice trajectoire interétablissements (CTI) comme leader dans le soutien aux équipes. La formalisation a montré une absence de retour d'informations et le manque de procédures de gestion standardisées. La communication et la connaissance mutuelle limitées entre les équipes ont été identifiées comme principales difficultés d'internalisation. Concernant les objectifs partagés, la différence de missions des établissements (chirurgicale, réadaptation) se traduit dans une difficulté d'harmoniser les intérêts centrés sur le patient. Les facteurs facilitant la CIP étaient : les facteurs de proximité, l'autonomie des professionnels, l'accessibilité de la CTI; alors que l'absence d'un dossier informatisé, la rareté des espaces d'échanges et la compréhension limitée des rôles/responsabilités de l'autre étaient des facteurs contraignant la CIP.

Conclusion: L'étude a décrit l'état de la CIP dans une configuration d'offre de services impliquant plus d'un établissement de santé. L'identification de facteurs facilitant/contraignant la CIP a engagé les parties prenantes dans l'élaboration de modalités collaboratives telles que la standardisation de procédures de partage d'informations et de suivi commun des patients.

Reclaiming Métis Health: Unveiling Preventative Behaviors, Chronic Disease, and Food Security in the Red River Métis Community through the Métis Regional Health Survey

Presented by: Lisa Rodway

All Authors*:* *Michelle Driedger1, Lisa Rodway2, Ryne Swift2, Josée Lavoie1, Olena Kloss2, Uma Yakandawala2, Frances Chartrand2*
Author Affiliations: *1University of Manitoba, 2 Manitoba Métis Federation*

Background and Objectives: Colonization has impacted current health and political systems, creating a lack of Red River Métis specific health information and culturally informed health care. The objective of this study is to investigate the performance of preventative health behaviors related to disease prevention, chronic disease rates, as well as food security within the Red River Métis Community as part of the larger-scale Métis Regional Health Survey (MRHS) to improve Red River Métis health.

Approach: This cross-sectional survey-based study uses a structured questionnaire containing 23 sections, totaling 163 questions. The survey collects comprehensive information on all aspects of Red River Métis health, including preventative health behaviors, food security, nutrition, sleep quality, and physical activity. The study contains 780 Red River Métis Citizens residing in Manitoba, aged 18 years and older. Our approach selects nutrition, sleep quality, physical activity, and food availability as a proxy for preventative health measures. This will be compared to an individual's self-reported health status and health conditions. The effect of self-reported preventative health on Citizen's overall health outcomes is also assessed.

Results: Among the survey participants, 22% (n = 165) have diabetes, 11% (n = 83) have heart disease, and 34% (n = 254) have high blood pressure. Alarmingly, 73% (n = 120) of individuals with diabetes, 69% (n = 57) with heart disease, and 67% (n = 169) with high blood pressure reported not regularly exercising, a crucial preventive health measure. Additionally, high rates of daily or more frequent junk food consumption among participants were noted, including 19% (n = 144) for soda pop and 16% (n = 122) for sweets. These patterns highlight potential risks to the future health of the Red River Métis Citizens, emphasizing the need for targeted interventions to address sedentary behavior and dietary habits that contribute to chronic disease.

Conclusion: The concerning trend of individuals neglecting preventive health measures including poor eating habits, highlights the need for a distinctions-based approach in healthcare as part of reconciliation. Developing a targeted strategy for Red River Métis which emphasizes preventative health measures and care, will be crucial to improving Citizens' overall health outcomes.

Advancing Diabetes Care through Point-of-Care Testing and Self-Management in Red River Métis Communities across Manitoba

Presented by: Lisa Rodway

All Authors: *Lisa Rodway1, Toluwani Omomo1, A. Frances Chartrand1, Olena Kloss1, Ainsley Balkwill1, Uma Yakandawala1*
Author Affiliations: *1Manitoba Métis Federation*

Background and Objectives: Red River Métis (RRM) Citizens experience a higher prevalence of diabetes compared to other Manitobans. Diabetes complications are more common among RRM Citizens residing in rural and remote regions, where healthcare services are limited. This Community engagement initiative aims to establish effective diabetes screening and self-management practices. The goal is to assess type 2 diabetes and related complications then developing culturally sensitive and tailored programs and resources for diabetes testing, education, and care.

Approach: Two mobile clinics visit Communities across the Manitoba Métis Federation's (MMF) seven Regions in Manitoba. Each mobile clinic is staffed with a registered nurse, a foot care nurse and support staff. The clinics conduct diabetes risk assessments to evaluate the risk of developing diabetes. A brief 5-minute health check includes assessments of blood pressure, pulse, and oxygen levels. Point-of-care testing (POCT) delivers immediate test results, including Hemoglobin A1c (HbA1c) for assessing average blood sugar levels over the past 2-3 months and analysis of cholesterol levels through a lipid panel. Certified foot care nurses provide expert foot care services.

Results: Twenty-one MMF Locals across the seven Regions in Manitoba have subscribed to the mobile clinic services. The mobile clinic initiative has reached 710 Citizens between August 2022 and September 2023. There were 5-minute check-ins conducted for 206 Citizens, HbA1c testing for 263, lipid profiles assessed for 196, foot care provided to 45 and 407 vaccines administered, all contributing to Community health and well-being. Citizens' feedback reinforced the need for comprehensive and culturally informed diabetes care. Expansion of services to include nutrition counseling and gestational diabetes care plans was highlighted for future consideration, enhancing the initiative's impact on holistic Community well-being.

Conclusion: This initiative demonstrated success in delivering culturally sensitive diabetes care to RRM Citizens in rural Communities. Ongoing feedback highlights the need for tailored care responsive to Community health needs. Expansion to include additional services and long-term evaluation aim to enhance the initiative's success and Citizen's compliance with self-management practices.

Assessing Validity in Alberta, Canada, of a Quality Appraisal Tool for Indigenous-Engaged Research

Presented by: Lilla Roy

All Authors: *Fatima Al Sayah1, Jeff Johnson1, Elder Juliette Auger2, Susan Chatwood1, Kristen Swampy1, Lilla Roy1*
Author Affiliations: *1University of Alberta, 2Edmonton*

Background and Objectives: Quality appraisal tools (QAT) are used to assess the quality of research and evaluate evidence. QATs developed from a First Nations perspective or designed to assess the quality of ethically engaged Indigenous research would improve the ability to evaluate evidence. This study aims to, 1) map the Aboriginal and Torres Strait Islander QAT to existing ethical guidance in Canada and, 2) explore validity of this tool for Indigenous people in western Canada.

Approach: This work engages Indigenous research partners. Publicly available ethical guidance for research with Indigenous people in Canada was reviewed alongside the Aboriginal and Torres Strait Islander QAT. Ethical guidelines were gathered from national and regional sources reflecting Metis, Inuit, and/or First Nations perspective. QAT content was mapped by question to concepts in each guiding document, rather than by exact wording or terminology. Results were cross-tabulated in a visual form and summarized.
A modified Delphi Technique will engage individuals with experience in Indigenous research to reach consensus regarding the QAT and elements of meaningfulness, comprehensiveness, language, organization, and uniqueness of questions.

Results: A preliminary mapping exercise is complete using five key documents. Three included collective guidance for Indigenous people in Canada (First Nations, Metis, and Inuit), while one was specific to Inuit, and one to Metis. Ethical principles from national research guidance (TCPS2) applied to all questions on the QAT. OCAP principles aligned with the least number of questions, however, all four principles of OCAP were represented. Almost all documents aligned with principles of community-identified priorities, access, ownership, control, and capacity strengthening. Several principles of ethical research from guidance documents in Canada were not identified in the Aboriginal and Torres Strait Islander QAT and justify the next phase of research.
The second phase of work is pending ethics approval and preliminary results are anticipated by April 2024.

Conclusion: This project will benefit Indigenous people living on Turtle Island (what is now known as Canada) and learn from Indigenous people how best to evaluate Indigenous-engaged health research. For health researchers, policy makers, and evaluators, it will support the ability to evaluate methodological quality of health-related evidence involving Indigenous people.

Validity of the EQ-5D-5L and Appropriateness of Health Valuation Tasks for Indigenous People in Alberta: A Qualitative Study

Presented by: Lilla Roy

All Authors: *Susan Chatwood1, Jeff Johnson1, Elder Juliette Auger2, Kristen Swampy1, Lilla Roy1, Fatima Al Sayah1*
Author Affiliations: *1University of Alberta, 2Edmonton*

Background and Objectives: There is a global imperative to acknowledge the unique health needs of Indigenous Peoples and enhance the relevance of healthcare interventions. This study pursues two objectives: firstly, to investigate the EQ-5D-5L as a preference-based measure of health-related quality of life (HRQL) and how well it represents HRQL for urban Indigenous people in Alberta. Secondly, to explore the conceptual feasibility of techniques used to elicit values for the EQ-5D-5L and how they align with Indigenous perspectives.

Approach: This study was co-designed in collaboration with Indigenous research partners to foster cultural sensitivity and trust within local communities. Semi-structured interviews are co-facilitated with an Indigenous research partner. Face and content validity of the EQ-5D-5L will be explored with urban Indigenous people using qualitative description. Participants review the EQ-5D-5L and share thoughts as to its conceptualization of health, translation, and word choice. Conceptual feasibility and interpretation of valuation tasks are explored using a think-aloud approach for two choice set exercises - time trade off (TTO) and discrete choice experiment (DCE). Data are thematically analyzed and interpreted with Indigenous team members.

Results: Concurrent data collection and analysis is ongoing in Alberta, Canada. Participants are First Nations, Inuit, or Metis people in Edmonton or a neighboring urban center (Urban Indigenous) who are engaged in health, policy, community or leadership roles, such as researchers, health care professionals, community health workers, or other community roles. We anticipate preliminary data to be available in March 2024. Where possible, findings will be initially shared with Indigenous partners and community, followed by broader dissemination.

Conclusion: This research has profound implications for understanding the usefulness and appropriateness of the EQ-5D-5L for Indigenous Peoples in Canada. Given distinct Indigenous conceptualizations of health, this represents a crucial step toward developing recommendations and potential modifications to existing decision-making methods to better align with Indigenous values and preferences.

Co-Création Clinique: Quand les patients deviennent les architectes de la recherche médicale

Presented by: Kamilla Saadi

All Authors: *Marie-Pascale Pomey1, Kamilla Saadi1*
Author Affiliations: *1Centre de Recherche du CHUM*

Background and Objectives: Une équipe de chercheurs mène un essai clinique randomisé sur l’apport des cannabinoïdes afin de limiter la spasticité des patients atteints de sclérose en plaques (SEP) (projet CANSEP). L’équipe comprend trois Patients-Partenairs Chercheurs (PPC). Cette étude analyse l’apport de ces PPC à la réalisation de cet essai clinique afin de dégager des pistes d’amélioration.

Approach: Une étude longitudinale a été réalisée mobilisant des méthodes mixtes soit : 1) des observations non participantes des réunions bimensuelles entre chercheurs et PPC, 2) des questionnaires quantitatifs et des entretiens qualitatifs semi-structurés sur la perception de l’apport des PPC par les chercheurs de carrière et les PPC. Une analyse quantitative (fréquence et variabilité) et qualitative (thématique) a été réalisée.

Results: 100% des chercheurs ont constaté que la participation des PPC a conduit à une compréhension plus holistique des objectifs de l'étude, à une élaboration précise d'outils de collecte de données, notamment pour les mesures subjectives, et à une intégration réaliste des besoins des patients, qui auraient pu être négligés. Les PPC ont joué un rôle significatif dans la conception de l'essai, notamment en suggérant le moyen d'administration du traitement optimal, en effectuant un essai préliminaire afin de proposer des améliorations. Des éléments cruciaux repérés par les PPC ont été modifiés ou ajoutés, améliorant l'expérience des participants, tels que des formulaires préliminaires en ligne, l’organisation temporelle des visites cliniques afin d'accommoder les difficultés de mobilité.

Conclusion: L'implication des PPC dans la réalisation d’un essai clinique randomisé se révèle incontournable pour réaliser les objectifs de l'étude, en recentrant la réalisation de l’intervention sur les besoins réels des patients. Les chercheurs sont encouragés à inclure des PPC dans la réalisation d’essai clinique en tant que co-chercheurs.

Maximizing Quality Assurance for Computer Assisted Personal Interviews in Health Services Research: The TREC Approach in Long-term Care

Presented by: Seyedehtanaz Saeidzadeh

All Authors: *Joseph Akinlawon1, Cybele Angel1, Ashley Daigle1, Seyedehtanaz Saeidzadeh1, Carole Estabrooks1, Peter Norton2, Julie Melville1, Joel Minion1*
Author Affiliations: *1University of alberta, 2University of Calgary-Department of Medicine*

Background and Objectives: Translating Research in Elder Care (TREC) is a pan-Canadian health services research program in long-term care (LTC) homes. Trained interviewers collect longitudinal survey data from unregulated staff using computer-assisted personal interviews (CAPI), with weekly monitoring by a quality control (QA) group. Little is known about using CAPI in LTC settings or how CAPI performance benefits from QA efforts. This presentation describes how TREC uses CAPI-QA to produce the highest possible data quality.

Approach: TREC has completed seven data collection waves using CAPI since 2008. CAPI interviewers are trained to a) minimize survey completion time, thus limiting the potential for reductions in resident care, and b) build interpersonal relationships during CAPI. The CAPI-QA group includes LTC researchers, field experts, and data analysts with activities being conducted in near real-time to allow for course corrections. During data collection, the group receives weekly data that includes average survey completion time by survey sections and by interviewers, descriptive statistics on survey responses and interviewers' performance, and detailed checklists completed by interviewers at the end of each survey.

Results: Data obtained through CAPI and monitored by QA had high quality with minimal missing data. CAPI-QA has contributed to three major results for TREC.

1. The CAPI-QA team has advised on modifying the data collection process as needed. For example: excluding survey questions that take unacceptably long to complete or adding a mouseover option (computer functionality) for better clarification during the interview.
2. Identifying trends and patterns in data collection activities has enhanced collaboration for solving problems, e.g., managing situations when interviewers need additional training
3. Transferring the lessons and strategies learned through CAPI to new regions that are in the process of implementing TREC surveys for their program of research.

Conclusion: Quality assurance is essential to obtaining high-quality longitudinal data. Policymakers in LTC can benefit from the results of such accurate longitudinal data for their planning and decision-making.

Analysis of Canadian Nursing Workforce Data 2015-2022: An exploratory ecological study

Presented by: Natalie Sapiro

All Authors: *Shabnam Vatanpour1, Riley Martens1, Megan Harmon1, Catherine Eastwood1, Natalie Sapiro1, Robin Walker1, Tracie Risling1*
Author Affiliations: *1Univsersity of Calgary*

Background and Objectives: Determining the ability of a country's nursing workforce to meet the health care needs of the population is essential for optimal health outcomes. 'Nursing shortage' is frequently heralded as an issue, yet it is unclear how 'shortage' is defined and calculated. The purpose of this study was to collect and link publicly available Canadian data to describe and compare provincial trends in nursing workforce capacity.

Approach: Primary data sources included linking Statistics Canada and Canadian Institutes of Health Information (CIHI) data from 2015 to 2022. Statistics Canada tracks provincial population data and job vacancy rates. CIHI receives data from provincial nursing organisations on demographics, roles, and employment status. To estimate a sufficient workforce, job vacancy rates (a proxy for provincial need) were cross tabulated with the number of registered nurses (RNs) and registered psychiatric nurses (RPNs) per year in each province. Licensed practical nurses (LPNs) and nurse practitioners (NPs) were not included.

Results: The 320,000 Registered Nurses and Registered Psychiatric Nurses employed in Canada has increased by 8.6% (2015-2022) over time while the population has grown 1.1% year over year. Canadian nurses are mostly in direct patient care (~85%) versus other roles (~15%) as of 2022. All 10 provinces report complete data while the three territories report limited data (NWT, Yukon and Nunavut). The ratio of RNs to job vacancies was the lowest in Quebec (2.5:1) and highest in Alberta (40:1) as of 2022 when comparing the provincial sum of nurses to job vacancies.

Conclusion: This outlines the status of the Canadian nursing workforce and the contributing factors. The trends could only be described annually due to aggregated data. Data on a country's nursing workforce measured monthly and consistently would yield clearer information for decision-makers to plan for programs and staffing.

Comparing pharmacist-administered long-acting injectable buprenorphine policies for opioid use disorder treatment in Canada and Australia

Presented by: Anita Shah

All Authors: *Dr Kellia Chiu1, Polina Kyrychenko2, Jenny Wang3, Dr. Abhimanyu Sud1, Saloni Pandya4*
Author Affiliations: *1Department of Family and Community Medicine, Faculty of Medicine, University of Toronto, Toronto, Canada, 2(Faculty of Medicine, University of Toronto, Toronto, Canada, 3Faculty of Health Sciences, McMaster University, Hamilton, Canada, 4School of Medicine, University of Limerick, Limerick, Ireland*

Background and Objectives: The health burden of opioid use disorder (OUD) is significant and increasing dramatically. Long-acting buprenorphine (LAIB) is a relatively novel therapy requiring less frequent dosing compared to existing opioid agonist therapies (OAT). Pharmacists are beginning to administer LAIB as part of expanded scope of practice. Our objective is to describe policies for pharmacist-administered LAIB across four Canadian provinces (Manitoba, Nova Scotia, Ontario, Saskatchewan) and two Australian states (New South Wales, Victoria) to inform future implementation.

Approach: We conducted a comparative policy analysis drawing on documentary data from national and state/provincial governments and organizations such as professional colleges. We collected government reports, practice guidelines and legislative documents. We used the health system dynamics framework to construct the domains in our data extraction tool. These included financing, governance, resource allocation, as well as the values and social context which drive decision-making in OUD treatment. Data analysis involved creating narrative summaries for each jurisdiction by organizing results into four broad categories: OAT context, LAIB regulation and policies, pharmacy practice context and involvement in OAT, and pharmacist-administered LAIB policies.

Results: The scope of practice for pharmacists significantly differs across jurisdictions for medication injection, prescribing, and OAT monitoring despite an overall consensus of increasing professional autonomy. Victoria, Saskatchewan, Manitoba and New South Wales have some guidance for LAIB administration developed by their health departments for pharmacists to reference, whereas Nova Scotia and Ontario rely on recommendations from leading addiction health service organizations. While all jurisdictions involve some degree of professional collaboration between pharmacists and other healthcare providers when administering LAIB, Victoria and Saskatchewan have options for joint funding arrangements and entering official practice agreements respectively. Across all jurisdictions, compensation for pharmacists administering LAIB is primarily accomplished through the submission of claims for government reimbursement to reduce out-of-pocket costs for clients.

Conclusion: This policy analysis offers useful insight into the landscape of pharmacist-administered LAIB, the existing gaps and the opportunity for accessible community-based OUD treatment. Further research is required to ascertain the values, attitudes and challenges of pharmacists working with LAIB to inform successful implementation.

The 6C Approach: Provisional Principles for Provider Retention Interventions in Primary Healthcare

Presented by: Peter Sheffield

All Authors*: Rachelle Ashcroft1, Peter Sheffield1*
Author Affiliations: *1Factor-Inwentash Faculty of Social Work, University of Toronto*

Background and Objectives: Accelerating levels of provider turnover in primary healthcare is threatening the Canadian healthcare system. Addressing this crisis has been hampered by assessing mid-level constructs (e.g., burnout) instead of retention directly, and provider-level, profession-specific interventions that fail to account for the heterogeneity of primary healthcare practices. This conceptual model identifies principles underlying system- and practice-level interventions, applicable across professions, to advance provider retention research and enable local organizations to construct retention interventions relevant to their context.

Approach: A literature review of practice- and system-level interventions addressing provider retention explicitly for primary healthcare physicians, nurses, nurse practitioners, social workers, and/or pharmacists (the predominant professions in Canadian primary healthcare) was conducted (Jan 01 2003-May 01 2023 inclusive). Interventions assessing retention using four mid-level constructs (burnout, moral distress, resilience, well-being) were included given noted challenges in identifying retention as an outcome directly. Bronfenbrenner's developmental theory, the social determinants of health perspective, and third-wave positive psychology were applied as a conceptual framework to interpret results, and thematic analysis was used to identify guiding principles common to effective interventions across constructs.

Results: 14 review articles and 16 additional primary studies were included, addressing multi-scale interventions relevant to the retention of a range of interdisciplinary providers in primary healthcare settings. All identified interventions explicitly enabled providers and practices to (1) Cultivate close and longitudinal patient relationships. Five additional principles underlying successful retention interventions were present to varying degrees: (2) Celebrate diversity (of the healthcare workforce), (3) Center clinician autonomy, (4) Commit to shared care, (5) Compensate equitably (between primary healthcare and secondary/tertiary care, and within teams), (6) Curtail administrative tasks. These principles underlay practice, system, and policy-level interventions for retention, and were often applied at multiple levels of intervention simultaneously (e.g., improving practice-level workflows in conjunction with system-level changes to reduce documentation requirements).

Conclusion: Our identification of the principles underlying effective primary healthcare provider retention interventions directly is novel. Orienting clinicians, researchers, and policymakers towards principles may guide more effective intervention development. Next steps include a Delphi study with Canadian primary healthcare experts, providers, and policy-makers to further refine these principles.

Sepsis Policies, Guidelines, and Standards in Canada: A Jurisdictional Scoping Review

Presented by: Fatima Sheikh

All Authors: *Fatima Sheikh1, Lisa Schwartz1, Victoria Chechulina2, Alison Fox-Robichaud3, 4, Kali Barrett5, 6, 7*
Author Affiliations: *11. Department of Health Research Methods, Evidence and Impact, McMaster University, Hamilton, ON, Canada. , 22. Faculty of Science, Western University, London, ON, Canada. , 33. Department of Medicine, McMaster University, Hamilton, ON, Canada. , 44. Thrombosis and Atherosclerosis Research Institute (TaARI), McMaster University, Hamilton, ON, Canada. , 55. Institute of Health Policy, Management and Evaluation, University of Toronto, Toronto, ON, Canada. , 66. Department of Medicine, Temerty Faculty of Medicine, University of Toronto, Toronto, ON, Canada. , 77. Interdepartmental Division of Critical Care Medicine, University of Toronto, Toronto, ON, Canada*

Background and Objectives: Sepsis accounts for 48.9 million cases and 11 million deaths worldwide. Most studies on sepsis have focused on pathogenesis and treatment; however, 80% of sepsis begins outside healthcare settings, highlighting the need for policy measures to improve early detection. The purpose of this review is to identify and describe existing sepsis policies, clinical practice guidelines, and health professional training standards in Canada; and to highlight potential threats and opportunities for the development of sepsis policies.

Approach: To analyze the landscape of policies, guidelines, and standards, we performed a scoping review with the following stages: (1) identifying the research question, (2) identifying relevant studies, (3) study selection, (4) charting the data, (5) collating, summarizing, and reporting the results, and (6) consultation. Non-traditional sources of evidence were identified using environmental scanning methodology. Sepsis policies, guidelines, or training standards related to sepsis identification, management, and/or reporting, published or revised since 2010, and available in English/French, were included. We will use the framework method to guide narrative synthesis. Individuals with lived experience were involved at all stages of this review.

Results: Following systematic searches in five databases including EMBASE, CINAHL, Medline, Turning Research Into Practice (TRIP), and Policy Commons, 1329 sources of evidence were included in the first screening phase. Additional sources of evidence were identified by searching Canadian organizations responsible for regulating the training of healthcare professionals and reporting health outcomes at the provincial and national levels. Among the policies, guidelines, and standards included (n = 38), 16 focused on the acute management of sepsis, 0 focused on sepsis detection only, and 6 focused on sepsis detection and acute management. Of the 66 Royal College specialties and sub-specialties reviewed, only 10 included “sepsis” as a listed competency or objective of training.

Conclusion: In 2017 the World Health Assembly passed a resolution calling on member states to recognize sepsis as a priority. Canada has not yet met those goals. Understanding the current policy landscape in Canada is important to develop evidence-based policies to support the prevention, identification, and treatment of sepsis.

Building a Framework Using Intersectionality and Life Course Perspective

Presented by: Michael Short

All Authors: *Brenda Gamble1, Michael Short1*
Author Affiliations: *1Ontario Tech Univeristy*

Background and Objectives: Intersectionality is an emerging area of interest in research but lacks a well-defined methodological approach. Our team is conducting a study that incorporates intersectionality and the life course perspective to better understand the lived experiences of Canadian female Veterans who are or have been homelessness. We will present our approach, identify key principles to guide intersectionality work, and report the benefits of incorporating intersectionality alongside a life course perspective.

Approach: Study framework was informed by an intersectionality model, which focuses on several periods of life and investigates interactions between different social categories and the effect of these interactions on the lived experiences. Canadian female Veterans who are homeless or have experienced homelessness are interviewed to develop a life history grid and data on specific needs and challenges. Qualitative thematic analysis, an iterative participatory process is used to categorize data into themes. Multilevel coding brings together intersectionality and inductive methodological approaches by combining both an inductive thematic analysis (capture participants' interpretation) and a deductive template approach (capture research team's interpretation).

Results: The result of our approach is threefold. 1) The approach taken in our study allows us to better understand the unique experiences of female military personnel, based on the interaction of social categories, which shaped their social location and experience. 2) The next phase of the study will use this information to develop educational toolkits to support females Veterans and their service providers. 3) The approach taken in our study will provide a framework for other researchers to build on to support the evolution of a well-defined methodological approach for the intersectionality field. An approach that recognizes social location is a combination of factors and is unique for each person.

Conclusion: Addressing the methodological challenges to conducting intersectionality research will provide more meaningful evidence to address health challenges. In this study, homelessness and the multiple challenges associated with homelessness that impact health and well-being (sexual abuse, mental health). Our work serves as an example of how to put intersectionality into practice.

Enhancing Caregiver Well-being: An Economic Analysis of Team CarePal

Presented by: Cindy Sim

All Authors: *Kyle Riley1, Paisley Churchill2, Cindy Sim2*
Author Affiliations: *1HIMA Consulting, 2Team CarePal*

Background and Objectives: This study addresses the challenges faced by caregivers, particularly in health and employment domains. It aims to evaluate the economic impact of Team CarePal, a novel intervention designed to improve caregivers' well-being and work-life balance.
Team CarePal is an app-based software platform that allows caregivers to implement and track their treatment plan for a loved one and access resources and support. It enables better time management and mitigates the emotional impact and stress of caregiving.

Approach: Utilizing a decision tree model and Canadian caregiver data, this analysis quantifies the benefits of Team CarePal. It incorporates Quality-Adjusted Life Years (QALYs), employment data, and health costs to demonstrate the potential improvement in caregivers' health outcomes and work productivity.
The primary outcomes studied in the analysis are health utilization and costs; hours worked and employment loss; and caregiver health utility. The study estimates the potential effectiveness of Team CarePal in addressing these outcomes and quantifies the total economic benefit for a population of caregivers.

Results: Findings indicate significant enhancements in caregivers' health, evidenced by increased QALYs and reduced stress. Economically, Team CarePal contributes to decreased work hours lost, suggesting notable productivity gains.
If Team CarePal can demonstrate the effectiveness estimated in the model, applied to 1,000 caregivers it would result in:

- 118 fewer caregivers experiencing significant stress and 80 fewer caregivers experiencing a health loss.
- Health system savings of $29,435 in caregiver health costs and $332,767 in LTC costs for the caree. The QALY gain is worth $517,244.
- 43,965 hours of work gained that would have been missed due to caregiving, worth $2.5M based on the average wage in Alberta.

Conclusion: Team CarePal demonstrates potential as a transformative tool for caregiver support, yielding positive health and economic outcomes. This underscores the need for incorporating such interventions in health policy frameworks.

Aiming Upstream: Policy Transfer Strategies to Support Health Impact Assessment in Ontario

Presented by: Stephanie Simpson

All Authors: *Stephanie Simpson1*
Author Affiliations: *1Institute of Health Policy, Management and Evaluation, University of Toronto*

Background and Objectives: Ontario's public health system is typically positioned as 'complementary' to healthcare given its apparent upstream and preventative focus. However, the largely behaviouralist approach to program and service delivery established by guiding legislation, including the Ontario Public Health Standards, arguably warrants action further upstream - namely, through direct intervention on the policies shaping the social determinants of health. Accordingly, this presentation will highlight key strategies for the implementation of a provincial-level Health Impact Assessment (HIA) protocol.

Approach: a Framework Analysis of case articles specific to Québec (n=12) and South Australia (n=17) identified the political mechanism conducive to the use of health impact tools within sub-national jurisdictions like Ontario. Mechanisms consistent across both jurisdictions guided the subsequent mapping of findings from a case study of routine policymaking within Ontario's Ministry of Health, which included interviews with policy staff (N=12) and a grey literature review (N=77). Consistencies in political mechanisms and policy institutions were then synthesized across the three jurisdictions, with a final framework detailing policy transfer strategies to support the adoption and sustained implementation of HIA in Ontario.

Results: four political mechanisms (PM) supporting the longstanding use of health impact tools in both Québec and South Australia may facilitate HIA use in Ontario. To secure HIA onto the political agenda, 'policy elites' (PM1) should capitalize on the province's embedded 'political culture' (PM2) by proposing existing legislative frameworks as HIA entry points. These include the Health Protection and Promotion Act (1990) and the Ontario Agency for Health Protection and Promotion Act (2008). Next, implementation should be guided by considerations of 'jurisdiction' (PM3); integrating HIA into the bureaucratic approval process will necessarily preserve existing policy mandates whilst capitalizing on the coordinative functions of this institutionalized brokering structure. Finally, for sustained HIA use, 'institutional power' (PM4) may be exercised by integrating HIA into Ontario's Cabinet Submission tool.

Conclusion: the four political mechanisms identified are well-aligned with existing HIA 'entry points' within the Ontario government. These findings can therefore support future efforts to secure HIA buy-in among political and policy officials and, in doing so, enhance the true complementary positioning of Ontario's public health and healthcare systems.

Barriers and facilitators to accessing and receiving supportive abortion care in Ontario

Presented by: Kathleen Slofstra

All Authors: *Kathleen Slofstra1, Margaret Gibson1, Elena Neiterman1, Hannah Neufeld1*
Author Affiliations: *1University of Waterloo*

Background and Objectives: While abortion has been decriminalization in Canada in 1988 and medication abortion was approved in 2015, there is considerable variation in the provision of abortion care across Canada and little research on the experiences of patients accessing abortion care in Ontario. Addressing this gap, this research examined patient's perceptions of barriers to accessing care while also describing patient-identified facilitators and challenges to receiving supportive care.

Approach: We used a qualitative research design, drawing on 15 in-depth semi-structured interviews from racially and gender diverse participants across Ontario. Participants were recruited through social media accounts of reproductive care organizations. Individuals were eligible to participate in the study if they had received a surgical and/or medication abortion in Ontario in the last 3 years. Interviews were conducted virtually or over the telephone and lasted 1-1.5 hours. We also employed a novel technique of healthcare journey mapping during interviews to visually depict key healthcare encounters and for member checking. Narrative-thematic analysis was used to elicit themes from interviews and maps.

Results: Participants received abortion care in a variety of primary care settings, including walk-in clinics, family doctor offices, hospitals, and abortion clinics. Preliminary findings suggest that barriers to accessing care include difficulty finding services, delays in timely care, and gatekeeping interactions (i.e. questions regarding birth control use or multiple abortions). Facilitators to quality care include compassionate and unhurried response from healthcare professionals, provision of relevant information, and utilization of personal resources (i.e. partner support, time off work, and/or therapy). Participant accounts also recommend abortion care could be improved by revising procedural requirements (i.e. ultrasound requirements), clarifying the potential severity of side effects, improving pain management, and creating more avenues for non-judgemental post-abortion care.

Conclusion: We identified several gaps in abortion care services to providing patients with accessible and quality care. Further infrastructure should be provided to abortion services in order for them to continue compassionate, evidence-based care. We offer recommendations for improving responsiveness of abortion care to patients' emotional and physical needs.

Advancing Cultural Safety through Measuring and Monitoring Interventions to Address Anti-Indigenous Racism in Health Systems

Presented by: Wynonna Smoke

All Authors: *Dr. Roseann Larstone1, Wynonna Smoke2, Patricia Sullivan-Taylor3*
Author Affiliations: *1Northern Health Authority, British Columbia, 2Hamilton Health Sciences Centre, 3Canadian Institute for Health Information*

Background and Objectives: Anti-Indigenous racism in health systems is systemic and results in care avoidance, trauma and negative outcomes, including preventable deaths. Despite a burgeoning recognition of harms experienced by Indigenous Peoples and targeted efforts to redress them, there are no national measurement guidelines to identify gaps, track progress, and drive change.
Indigenous-led cultural safety measurement and ongoing monitoring supports improvements in health systems and health outcomes of Indigenous Peoples through enhanced insight and accountability.

Approach: In 2021, CIHI published a cultural safety measurement framework. In collaboration with First Nations, Inuit and Métis advisors and Working Group, efforts continued in 2023 to measure the 'interventions' section of the framework. This included literature review and engagement with Indigenous and measurement experts to understand intervention evidence and priorities.
Using this evidence, we co-designed an self-assessment tool that measures the implementation status of interventions addressing anti-Indigenous racism. Hospitals, primary care, home care and long-term care organizations can use the tool for baseline and progress monitoring. Testing is underway to enable refinement and planning for expanded use in FY 2024/25.

Results: The literature review comprised cultural safety measurement evidence in academic and grey literature between 2016-2023. Results included 34 publications with Indigenous authorship (68%); 23 of which included interventions and/or measurement evidence. Nearly all 100 interventions identified were referenced in Indigenous-authored work. Themes included: Leadership, Governance and Administration, Human Resources, Health Services, and Data and Evidence.
Subsequently, CIHI engaged 19 individuals (8 Indigenous) identified through the scan and potential tool users, to validate priority measurement areas and approach. Participants see value in advancing standardized measurement as one step to address Indigenous-specific racism in health service organizations. Timing is appropriate given early days of learning and commitment to action the TRC's Calls to Action.
Participants recommend complementing organizational self-assessment with patient and workforce experience surveys.

Conclusion: It is essential to plan, implement and evaluate cultural safety measurement work in collaboration with Indigenous partners (patients, organizations, communities). Additional engagement with testing sites, Indigenous organizations and the Working Group is underway to refine the tool. The literature review report and engagement findings report are available on CIHI's website.

To what extent are older adults receiving team-based primary care?

Presented by: Nadia Sourial

All Authors: *Isabelle Gaboury1, Rachelle Ashcroft2, Jean-Noel Nikiema3, Claire Godard Sebillotte4, Nadia Sourial3, Mylaine Breton1, Colette Dufresne Tassé5, Morgan Slater6, Marie-Eve Poitras1, Janusz Kaczorowski3, Géraldine Layani3, Catherine Donnelly6, Howard Bergman*
Author Affiliations: *1Université Sherbrooke, 2University of Toronto, 3Université de Montréal, 4Université McGill, 5Centre de recherche du centre hospitalier de l'Université de Montréal, 6Queen's University, 7Association of Family Health Teams of Ontario, 8CISSS Centre Sud de l'Ile de Montréal*

Background and Objectives: Interprofessional primary care (IPC) teams are considered the gold standard for delivering care to older adults with multimorbidity. There is a lack of evidence, however, on who, how and the extent to which different health providers within IPC teams contribute to the care of this population. This study aims to describe which health providers are involved in the care of older adults with multimorbidity, the intensity of their involvement and the services provided.

Approach: Electronic medical record (EMR) data will be extracted for 350 adults 65+ with at least three chronic conditions and with visits in 2023 to a university-affiliated family medicine group in Montreal. Data on patient consultations with any health provider will be assessed and classified according to the 6W framework to reflect care delivery across care providers(‘which’), care received(‘what’), intensity of care(‘when’), whether care is delivered in person or virtually(‘where’), for whom care is delivered(‘who’) and for what reason(‘why’). The quality of the EMR documentation in describing these categories will be described.

Results: A descriptive analysis of the 6W categories will be conducted and presented for each health provider. Results will be presented for the overall sample and stratified by chronic condition in order to explore variations across patient groups.

Conclusion: Our results will help inform IPC practices to support the care of older adults and shed light on potentially underserved patient populations. In addition, this work will inform on the quality and limitation of current EMR data to document the contribution and work of health providers in primary care teams.

Transformative Impact: Shaping Inclusive Blood Donation Policies through Strategic Knowledge Mobilization

Presented by: Travis Sztainert

All Authors: *Travis Sztainert1*
Author Affiliations: *1Canadian Blood Services*

Background and Objectives: In 2017, Canadian Blood Services and Héma-Québec initiated the MSM (men who have sex with men) Research Program to fill evidence gaps and advance the MSM blood donor deferral policy. This comprehensive program, funded by Health Canada, comprises 15 research projects aiming to redefine eligibility criteria and screening processes for blood and plasma donation. This program adopts an innovative approach to address the complexities of the MSM blood donor deferral policy, emphasizing tailored solutions.

Approach: The MSM Research Program adopts a unique approach, engaging stakeholders from the outset to co-create the research agenda. Through established relationships with LGBTQ+ communities, patient groups, and regulators, priorities were identified in a multidisciplinary meeting, guiding subsequent knowledge production and dissemination. Ultimately, 15 projects were funded through the program that brought together experts in social and behavioral sciences, public health, epidemiology, and collaborators from LGBTQ+ and patient communities. To facilitate coordinated evidence generation, the program incorporates networking and knowledge mobilization activities, including regular progress reviews, teleconferences, a collaborative web portal, lay research summaries, and a Knowledge Synthesis Forum.

Results: The program's networking and knowledge mobilization activities have proven effective in generating coordinated evidence. Research teams have published scientific articles and developed accessible outputs such as videos and pamphlets. In May 2021, research-informed proposals enabled expanded plasma donation eligibility for specific groups. Notably, a successful request to Health Canada in April 2022 led to the removal of waiting periods for men who have sex with men, replacing it with sexual behavior-based screening for all donors. The program's initiatives informed training for internal stakeholders and the overall approach to rolling out the change. Ongoing assessments now explore broader impacts, including additional funding, and the development/hiring of trainees, further solidifying the program's transformative influence. Challenges include knowledge transfer among diverse groups and managing different timelines and expectations.

Conclusion: The MSM Research Program exemplifies the pivotal role blood operators play in multidisciplinary research. By leveraging expertise and fostering strong engagement with the LGBTQ+ community, Canada's blood operators have implemented an initiative promoting safe, equitable, and feasible donor policies through collaborative knowledge co-creation across scientific, medical, and social domains.

Updating the Community Health Nurses of Canada Core Competencies for Home Health Nursing: a modified eDelphi study

Presented by: John Tadeo

All Authors: *Barb Chyzzy1, Paul Holyoke2, Melissa Northwood3, John Tadeo2, 4, Justine Giosa2, 5, Margaret Saari2, 6, Chelsea Coumoundouros2*
Author Affiliations: *1Daphne Cockwell School of Nursing, Toronto Metropolitan University , 2SE Research Centre, 3School of Nursing, McMaster University, 4Western University, 5School of Public Health Sciences, University of Waterloo, 6Lawrence S. Bloomberg Faculty of Nursing, University of Toronto*

Background and Objectives: Since development of the Canadian Home Health Nursing (HHN) Competencies in 2010, the landscape of community-based care has shifted due to the hospital capacity crisis, increasing Canadian ethnocultural diversity, and the growing use of information and communication technologies. In this study, we are engaging nurses and interdisciplinary team members working in home health to establish a revised set of competencies which reflect the skills, knowledge, values, and attributes required by the workforce and present-day realities.

Approach: A pan-Canadian, modified eDelphi study has been undertaken to engage home health nurses in point-of-care, management, and academic roles to revise the HHN competencies. From a comprehensive list of pre-existing competencies, over three Delphi rounds, this nursing panel will identify a core set of competencies which support safe and ethical home health nursing practice across Canada. Interdisciplinary home care team members who collaborate with home health nurses will then consult on proposed competencies. Consensus meetings with an Advisory Group of influential home health nursing leaders will support the interpretation, prioritization, and mobilization of findings from this study.

Results: We have formalized an Advisory Working Group (AWG) of 28 members representing 9 provinces. 359 pre-existing competencies were identified in the environmental scan and consolidated to 97 competencies for consultation with the AWG. Insight from the AWG was incorporated to build the Round 1 questionnaire. Eighty-five nurses representing 11 provinces / territories were recruited to participate as members of the nursing Delphi panel. This study will leverage the experiences and expertise of the nursing panel to solicit ideas for additional competencies and reach consensus on the relevance and importance of newly proposed and pre-existing competencies. The interdisciplinary panel of home care team members will then provide feedback on the quality and completeness of competencies drafted from the previous Delphi rounds.

Conclusion: Updating core competencies with a pan-Canadian Delphi Nursing Panel supports a more unified understanding of the knowledge, skills and personal attributes required for safe and ethical community nursing practice in Canada—informing future education, training and workforce development initiatives that support consistent care delivery and responsiveness to diversity in needs.

Exploring community pharmacists' perspectives on a mobile health applications platform for supporting their interventions on non-adherence to pharmacotherapy for chronic diseases: A qualitative study.

Presented by: Cynthia Takponon

All Authors*:* *Cynthia Takponon1, 2, Alexandre Chagnon3, Michaël Cardinal3, Line Guénette1, 2*
Author Affiliations: *1Faculté de pharmacie Ulaval, 2Centre de recherche du CHU de Québec, 3TherappX*

Background and Objectives: Non-adherence to treatment is a critical issue impacting patient health and healthcare costs. Community pharmacists, crucial in addressing this challenge, face persistent non-adherence despite dedicated efforts. In response, innovative solutions, particularly health applications, have emerged. The AppGuide platform consolidates health applications, integrating direct recommendations from healthcare professionals to patients. This study aims to assess pharmacists' experiences implementing AppGuide in their practice, shedding light on its effectiveness and utility in supporting their interventions on non-adherence.

Approach: Following the first phase, which consisted of recommending health applications via AppGuide to patients experiencing difficulty adhering to their treatment, we conducted semi-structured individual interviews with pharmacists and pharmacy students who had used the platform. The questions were formulated based on the conceptual framework of Patton, utilizing the participatory evaluation model, and the Technology Acceptance Model to explore specific themes. Verbatim transcriptions of the interviews were performed, and content analysis was carried out.

Results: Four pharmacists and two pharmacy students underwent interviews, They described the platform as simple, user-friendly, and easily navigable. The platform's highlighted utilities encompassed its capacity to reinforce patient advice and track health data. However, drawbacks surfaced, including initial discomfort and a desire for more detailed app descriptions. Some respondents also cited the time investment needed to become acquainted with the apps. Overall, feedback suggests a positive perception of the platform's simplicity and functionality, albeit with considerations for improvements in app descriptions and user acclimatization.

Conclusion: The experiences with AppGuide were generally positive. Further attention to user comfort and detailed app descriptions may enhance its overall effectiveness in supporting healthcare professionals and patients in managing treatment adherence.

Using Participatory Filmmaking for Knowledge Translation: Increasing Awareness of Diabetes and Homelessness

Presented by: Saania Tariq

All Authors: *Justin Lawson1, Jeremy Auger1, Hanan Bassyouni2, Tucker Reed2, David JT Campbell2, Anna Whaley1, Eshleen Grewal2, Scott Westby3, Brian Bowdridge1, Saania Tariq2, Matt Larsen2*
Author Affiliations: *1Calgary Diabetes Advocacy Committee , 2University of Calgary, 3Pluto Pictures*

Background and Objectives: The Calgary Diabetes Advocacy Committee (CDAC) is a community-based research group comprised of five people with diabetes and experiences of homelessness (i.e., co-researchers) and four researchers. The CDAC recently aimed to increase awareness of the challenges of living with diabetes while experiencing homelessness among the public and shelter staff through film. Film as a knowledge translation and exchange (KTE) tool can build empathy in viewers, something often difficult to achieve with traditional KTE products.

Approach: Our work followed the methodology of participatory filmmaking, an arts-based approach where community members participate in all project stages. CDAC partnered with a local professional production company to create the film and five shelter and medical staff to strengthen the authenticity of the narrative. Together, they participated in ten group discussions to refine specific themes about diabetes and homelessness to include in the script, provided oversight to inform the portrayal of homelessness and medical scenes during filming, made decisions regarding the video and sound cut, and planned and participated in screenings of the film to various audiences.

Results: The 40-minute film follows two fictional characters in a shelter as they navigate challenges identified by the group, including diabetes stigma, medication storage challenges, poor access to timely and appropriate food, low and high blood sugar experiences, overworked shelter staff, understaffed shelters, and the opioid crisis. Dissemination thus far has involved ten strategic screenings and panel discussions with 618 audience members, including urban and rural shelter administrators and staff, researchers, students, healthcare providers, and the public across Canada. Panel discussions featured two to five co-researchers, researchers, shelter staff, and/or filmmakers involved in the film creation process and have sparked immediate conversations with audience members about possible changes to shelters and other contexts that could improve services to better meet the needs of people with diabetes.

Conclusion: Participatory filmmaking can result in an effective and novel KTE tool that allows for broad reach and engaging dissemination. This approach may be particularly relevant for health services researchers aiming to inform policy and organizational changes by raising awareness, building empathy, and starting discussions with viewers.

Estimating the Rates of Undiagnosed Prediabetes and Diabetes among People Experiencing Homelessness

Presented by: Saania Tariq

All Authors: *Fatima Macavinta1, Tucker Reed1, David Campbell1, Saania Tariq1, Sara Scott1, Eshleen Grewal1*
Author Affiliations: *1University of Calgary*

Background and Objectives: Prediabetes and diabetes have emerged as formidable challenges to the health of people across Canada, with a surge in prevalence over the past several decades. Despite the convenience of screening with glycated hemoglobin concentration (A1C), people experiencing homelessness (PEH) often face barriers to accessing diabetes screening, potentially leading to underdiagnosis. This study aimed to assess the prevalence of undiagnosed diabetes among PEH in Calgary, Alberta, contributing insights for planning healthcare services and public health initiatives.

Approach: We conducted screening clinics at inner-city shelters in Calgary. Participants were >18 years old, had no previous diagnosis of diabetes, and self-reported as someone who was experiencing homelessness at the time of screening. Recruitment was done using posters and word of mouth. After obtaining informed consent, a trained research nurse completed point-of-care A1C testing using the Siemens DCA Vantage point-of-care analyzer. In addition to A1C quantification, participants completed the CanRisk survey and a demographic questionnaire. We used descriptive statistics to identify the proportions of prediabetes and diabetes, and CanRisk survey scores to identify the pre-test probability of diabetes.

Results: The mean age of participants (n=102) was 47.6 years, and the self-reported causes of homelessness were diverse: housing and financial issues (n=53), interpersonal and family issues (n=35), and health or corrections-related factors (n=27). Participants' pre-test probability of diabetes, based on their CanRisk score, varied substantially: 25 individuals were classified as having a low risk of developing type 2 diabetes or prediabetes, 39 participants were identified to be at moderate risk, while 36 individuals were classified as being at high risk. The average A1C was 5.60% (SD=0.57), with five values in the diabetes range and twelve in the prediabetes range, for a total of 17 participants who were found to have previously undiagnosed dysglycemia.

Conclusion: The high rate of undiagnosed prediabetes and diabetes among PEH reflects what is already found in the general population in Canada. Future research could involve the implementation of more accessible community screening initiatives aimed at detecting undiagnosed diabetes and connecting those affected with appropriate resources.

Developing and Implementing A Psychological Health and Safety Toolkit to Optimize Team Primary Care and Improve Their Training Programs

Presented by: Kamlesh Tello

All Authors: *Ivy Lynn Bourgeault1, Sophia Myles1, Melissa Corrente1, Houssem Eddine Ben-Ahmed1, Karina Urdaneta2, Jelena Atanackovic1, Kamlesh Tello2*
Author Affiliations: *1Canadian Health Workforce Network & UOttawa, 2Mental Health Commission of Canada*

Background and Objectives: The quality of healthcare services depends on the psychological safety and well-being of healthcare workers. Research highlights that many healthcare workers are suffering from burnout and other mental health issues, impacting the safety and quality of care. To optimize healthcare teams and transform their training programs, we have developed an online evidence-informed toolkit. This presentation aims to describe the development of this toolkit and its application to primary care teams and training programs.

Approach: To curate the toolkit, we conducted a systematic environmental scan methodology targeting relevant, open-access resources published in English or French between 2018 and 2023 to support the psychological health and safety of a diverse set of primary care practitioners in healthcare learning and working environments. Subsequently, we implemented, evaluated, and refined the toolkit by co-working with interprofessional primary care teams (e.g., physicians, nurses, social workers, and others) and training programs (e.g., nurse practitioners and paramedics) across Canada. Partner engagement included the development of training materials for practitioner specific training programs and practicing teams.

Results: An online bilingual toolkit of 122 resources addresses seven themes: team culture, workload management, clear leadership, psychological protection, physical safety, protection from moral distress, and support for self-care. For training programs, psychological health and safety modules were created for partner training programs to be integrated into online curricula (e.g., NPs) and piloted during paramedic practitioner workshops in support of their integration into a team-based model. Teams were presented with a toolkit and resources relevant to them were selected by the research team. An overview module that describes the toolkit and its applications based on project case studies (building off our TPC webinar) is designed for integration into the online Health Workforce Management component of the Health Workforce Studies micro-credential at uOttawa.

Conclusion: Our toolkit supports healthcare trainees, workers, educators, managers, and leaders who collectively share responsibility for creating and promoting a culture of civility within the workplaces.By optimizing primary care teams and improving their training programs, healthcare workers would be able to provide more integrated services for the population.

Impact of COVID-19 Pandemic on Colonoscopy Wait Times by Procedure Indication

Presented by: Melina Thibault

All Authors: *Alton Russell1, Myriam Martel2, Melina Thibault1, Alan Barkun2*
Author Affiliations: *1McGill, 2MUHC*

Background and Objectives: Patients are referred for colonoscopy for symptom assessment, screening, and surveillance. Public health measures to mitigate the spread of the COVID-19 pandemic disrupted services and increased patient delays for colonoscopy services in Quebec. The differential impact of these interruptions by colonoscopy indication is largely unknown. Delays in elective colonoscopies (e.g. for cancer screening) can negatively impact patient health outcomes with costly downstream resource demands. This study characterized colonoscopy delays in Quebec by indication and demographics.

Approach: Using 2018-2022 retrospective clinical data from two high-volume Montreal endoscopy centres and provincial administrative data, we characterized changes in colonoscopy wait times and the proportion of waitlisted patients who were delayed (wait time exceeded provincial guidelines) by procedure indication and demographics at time of referral. We used regression to examine clinical and demographic patient characteristics associated with delayed procedures during pre- and intra-COVID-19 periods. We used time series analysis to characterize trends in the proportion of waitlisted patients delayed, including SARIMA and MSTL modelling.

Results: The COVID-19-related public health measures resulted in record-high delays (median increase in wait times of 34-159% across colonoscopy indications). While older patients experienced longer wait times pre-pandemic, intra-COVID-19 wait times increased disproportionately for patients younger than 50. The proportion of waitlisted patients delayed peaked mid-2020 (56.9% delayed for screening; 56.0% for symptom assessment patients). By early 2022, screening patients' wait times had nearly returned to pre-pandemic levels (37.3% delayed vs a mean proportion delayed of 22.7% in 2019), but patients referred for symptom assessment continued to have longer wait times (53.8% delayed). Sub-analyses revealed that screening patients with positive FIT were on average older and experienced less delay compared to screening patients without positive FIT.

Conclusion: In Quebec, COVID-19 delays disproportionately impacted symptom assessment procedures and younger patients. Additional capacity or improved triaging may be needed to address persistent delays. Understanding the effects of the pandemic on colonoscopy services can inform strategies, such as digitizing patient records, for better monitoring and inform public health decisions.

Digital health interventions for chronic disease management among older adults in developed countries: A scoping review

Presented by: Venezya Thorsteinson

All Authors*: Briana De Roo1, Mir Nabila Ashraf2, Manahil Fatima 3, Venezya Thorsteinson1, Natasha L Gallant 4*
Author Affiliations: *1Department of Psychology,University of Regina, 3737 Wascana Parkway, Regina, Saskatchewan, Canada, S4S 0A2, 2Center on Aging and Health, University of Regina, 3737 Wascana Parkway, Regina, Saskatchewan, Canada, S4S 0A2, 3Aging, Residents, and Caregivers (ARC) Research Unit, University of Regina, 4Department of Psychology and Center on Aging and Health, University of Regina, 3737 Wascana Parkway, Regina, Saskatchewan, Canada, S4S 0A2*

Background and Objectives: Globally, around eighty percent of older adults aged 65 years and more at least have one, and sixty-eight percent have two or more chronic conditions. These older adults require greater accessible health care services. In this scoping review, we identify available evidence regarding digital health interventions to improve chronic disease management for older adults in developed countries.

Approach: A scoping review was conducted using Medline, JBI EBP Database, PsycINFO and Scopus. We included peer-reviewed journal articles describing original studies. Studies were eligible if they included (a) older adults (i.e., at least 65 years) (b) living with at least one chronic disease (e.g., cancer, cardiovascular disease, chronic obstructive pulmonary disease, diabetes) and (c) residing in at least one developed country (e.g. USA, Australia, Canada). Moreover, studies needed to present evidence regarding digital health interventions (i.e., emails, text messages, voice messages, telephone calls, etc.) for chronic disease management.

Results: Our search strategy resulted in a total of 9892 records. After screening at the title and abstract level, we identified a total 41 of records that were included following a full-text review.
The most common outcome was improved health outcome (n=15), followed by feasibility of intervention (n=11) and health-related quality of life (n=10). Most of the studies focused on Tele homecare (n=16), Web-based platforms (n=11), and mobile health (n=8). Few studies highlighted Telephone-based interventions such as phone, text message (n=4), and Video-based intervention (n=3). Limitation of studies has also been discussed that needs to be considered when designing digital health interventions for older adults living with chronic diseases.

Conclusion: Findings from this review provide an empirical evidence regarding digital health interventions. More evidence-based research is needed to better understand the feasibility and limitations associated with the use of digital health interventions for this population. Dissemination of findings at the stakeholder level is also crucial for policymakers in developed countries.

Long-term outcomes following active surveillance of low-grade prostate cancer: a population-based study using a landmark approach

Presented by: Narhari Timilshina

All Authors: *Antanio Finelli 1, Shabbir Alibhai 2, George Tomlinson 3, Narhari Timilshina3, Beate Sander 4*
Author Affiliations: *1Division of Urology and Surgical Oncology, University Health Network, Toronto, ON, Canada , 2Department of Medicine, University Health Network, Toronto, ON, Canada , 3Institute of Health Policy, Management and Evaluation (IHPME), University of Toronto, Toronto, ON, Canada, 4Toronto Health Economics and Technology Assessment (THETA) collaborative, University Health Network*

Background and Objectives: Active surveillance (AS) is widely used to manage low-risk prostate cancer (PC), but population-level long-term outcomes are limited. Our objective was to determine long-term population-level oncological outcomes in AS patients. A secondary objective examined the AS discontinuation rate.

Approach: In this retrospective, population-based study using linked administrative databases from Ontario, Canada, we identified low-grade PC patients managed with AS or initial treatment between 2002-2014. The 10- and 15-year metastasis-free survival (MFS), overall survival (OS) and cancer-specific survival (CSS) were compared between AS and initial treatment. A landmark of 24 months was selected for the primary analysis. Long-term outcomes were examined using multivariable proportional hazards models and a propensity-based approach.

Results: The cohort consisted of 21,282 low-grade PC patients with a median follow-up of 9.8 years. At 10-year follow-up the survival rates of remaining on AS was 39%, MFS was 94.2%, OS 88.7%; and CSS 98.1%, respectively. In adjusted models AS was associated with higher risk of metastasis (hazard ratio [HR]: 1.34, 95% confidence interval (CI) 1.15-1.57), overall mortality (HR 1.12, 95%CI 1.01-1.24), and PC-specific mortality (HR 1.66, 95%CI 1.15-2.39) compared to initial treatment. Survival analysis using 7,525 propensity-matched pairs was consistent with the primary analysis for MFS, OS and CSS.

Conclusion: In this large population-based study of long-term outcomes in men with low-grade PC, AS is associated with excellent long-term MFS and OS. However, long-term CSS was slightly inferior (1% worse at 10 years with AS), and this must be balanced against known harms of overtreatment.

Analyzing Linguistic and Culturally Discordant Care from the Perspectives of Nurse Practitioners in Ontario, Canada

Presented by: Marie-Eve Tittley

All Authors: *Alex Lee1, Krystal Kehoe MacLeod1, 2, 3, 4, Maya Gibb2, Marie-Ève Tittley1, Chantal Backman1*
Author Affiliations: *1University of Ottawa, 2Ottawa Hospital Research Institute , 3Bruyère Research Institute, 4Centre for Care Access and Equity Research*

Background and Objectives: In Ontario, language and cultural barriers significantly hinder care quality, patient experiences, and outcomes. This study focuses on Nurse Practitioners' (NPs) experiences with patients from diverse linguistic or cultural backgrounds. Despite the Official Languages Act, explicit directives for language concordant care remain insufficient. In-depth exploration of linguistic and cultural barriers is needed to promote increased awareness and development of tools and strategies for improved communication between NPs and their patients from minority groups.

Approach: Adopting a qualitative descriptive approach, this project engages 12 NPs from diverse practice settings across Ontario through semi-structured interviews. Our bilingual recruitment strategy used convenience and snowball sampling from our existing professional networks and through social media. Our interview guide was adapted from a previous study of palliative care physicians. Data from interview transcripts and the researcher's reflexive journal entries were analyzed using Reflexive Thematic Analysis and interpreted using an intersectionality theoretical framework.

Results: NPs commonly used professional interpreters via phone but also relied on Google Translate. Key challenges to overcoming issues posed by linguistic discordant care included the cost and inconsistent access to interpretation services due to organizational limits, and funding constraints. NPs commented on their need to be flexible and adapt to each patient's needs and that providing linguistic and culturally concordant care takes a long time. NPs emphasized the importance of understanding cultural nuances and sensitivity, integral to their holistic care approach. They often pursued cultural-competency training independently, although mentorship was significant in exemplifying quality care for minority populations. Personal experiences, continuous professional development, and skill advancement were deemed crucial for effectively handling the complexities associated with linguistic and cultural discordance in care.

Conclusion: This work helps promote a healthcare environment where the tools to enable language concordant care, clinician education teaching strategies to enable culturally competent care, and mentorship opportunities from leaders in these areas become part of regular clinical practice to help to ensure more equitable and high-quality care for all patients.

“A whole ball of all-togetherness”: A qualitative exploration of the interwoven experiences of intimate partner violence, brain injury, and mental health to support better care

Presented by: Danielle Toccalino

All Authors*: Danielle Toccalino1, Halina (Lin) Haag2, Amy Moore2, Angela Colantonio1, 2, 3, 4, 5, Emily Nalder3, 4, 5, Vincy Chan1, 3, 4, Christine M. Wickens1, 6, 7, 8*
Author Affiliations: *1Institute of Health Policy, Management and Evaluation, University of Toront, 2Lyle Hallman Faculty of Social Work, Wilfrid Laurier University, 3KITE-Toronto Rehabilitation Institute, University Health Network, 4Rehabilitation Sciences Institute, University of Toronto, 5Occupational Sciences & Occupational Therapy, University of Toronto, 6Institute for Mental Health Policy Research, Centre for Addiction and Mental Health, 7Campbell Family Mental Health Research Institute, Centre for Addiction and Mental Health, 8Department of Pharmacology and Toxicology, University of Toronto*

Background and Objectives: Intimate partner violence (IPV) is a global public health issue impacting 44% of Canadian women, with high rates of both brain injury (BI) and mental health concerns (MH) among survivors. Despite these high rates, there is limited research on the intersection of BI and MH (BI/MH) among IPV survivors. This research explored experiences with BI/MH among survivors and experiences receiving and providing care for IPV survivors with BI/MH incorporating survivor and provider perspectives.

Approach: This research used interpretive description methods involving semi-structured interviews and focus groups. Using purposeful sampling, 24 participants (18+) were recruited from across Canada in four categories: women survivors of IPV (n=6), executive directors/program managers (n=5), frontline workers (n=7), and employers (n=6). Participants were predominantly cisgender women (96%), of European origin (75%), with a university degree (71%). Semi-structured interviews or focus groups were conducted in English via Zoom, were 60-90 minutes in length, audio recorded and transcribed. Reflexive thematic analysis was used to analyze the transcripts, guided by Andersen’s Behavioural Model of Health Service use.

Results: Several themes were developed through thematic analysis. Survivors spoke of IPV, brain injury, and mental health challenges as a “ball of all-togetherness” that impacted them long after their abusive relationship and that finding appropriate care was like a full-time job. Providers noted that all three components (IPV, brain injury, mental health) need to be recognized and addressed to better support survivors. Providers spoke about needing a “toolbox full of strategies” and a flexible approach when supporting survivors, including connecting and collaborating across sectors. Findings were used to develop a mental health module on the Abused and Brain Injured Toolkit (www.abitoolkit.ca/supporting-survivors/mental-health-and-brain-injury/) and actionable recommendations for providers.

Conclusion: This project addresses a critical gap in understanding the impact of IPV, brain injury, and mental health challenges on healthcare-related needs and experiences. It is the first investigation of its kind in Canada, providing insights, resources, and practical solutions to better support IPV survivors with BI/MH.

Facteurs prédicteurs et coûts des réadmissions hospitalières chez les Patients atteints de MPOC : Une analyse au Québec

Presented by: Balkissa Tonde

All Authors: *Maude Laberge1, Balkissa Tonde1*
Author Affiliations: *1Université Laval*

Background and Objectives: La Maladie Pulmonaire Obstructive Chronique (MPOC) est un enjeu majeur de santé publique. Au Québec, elle génère un taux de réadmissions estimé à plus de 10% dans les 30 jours suivant la sortie. Les réadmissions évitables représentent un défi pour le système de santé du Québec. Notre étude vise à identifier les facteurs de risque des réadmissions dans les 30 jours suivant un congé et les coûts de la trajectoire à partir de l'admission initiale.

Approach: Notre étude rétrospective utilise les données de dossiers médicaux de patients atteints de MPOC et des données financières de l'Institut Universitaire de Cardiologie et de Pneumologie de Québec (IUCPQ) sur période de 2018 à 2022. Après le calcul de statistiques descriptives pour décrire la population d'étude, une approche de modélisation basée sur un modèle de Machine Learning sera développée pour la prédiction des risques de réadmission. Par ailleurs, nous adopterons une approche Bottom-up, du point de vue de l'IUCPQ payeur, pour estimer les coûts directs liés aux réadmissions.

Results: On s'attend à ce que les modèles de Machine Learning développés démontrent une capacité prédictive significative et plus précise à identifier les patients à haut risque de réadmission, comparativement aux méthodes de prédiction traditionnelles.
De plus, l'étude devrait révéler que la réadmission des patients atteints de MPOC dans les 30 jours suivant leur sortie représente un fardeau économique conséquent pour le système de santé québécois. Par ailleurs, elle devrait mettre en évidence le besoin de stratégies de prévention des réadmissions.

Conclusion: Notre étude pourrait révéler avec précision les facteurs de risque des réadmissions liées à la MPOC et quantifier son impact économique sur le système de santé. Ces résultats pourraient guider les décideurs dans les stratégies de prévention des réadmissions et l'optimisation des ressources allouées à la gestion de la MPOC.

Exploration des facteurs prédictifs de l'accident vasculaire cérébral (AVC) : comparaison de deux techniques d'apprentissage automatique

Presented by: Métogara Mohamed Traoré

All Authors*:* *Métogara Mohamed Traoré1, 2, Maude Laberge1, 2, 3*
Author Affiliations: *1Centre de recherche du CHU de Québec-Université Laval, 2Vitam, Centre de recherche en santé durable- Université Laval, 3Centre de Recherche du CISSS de Chaudière-Appalaches*

Background and Objectives: L'accident vasculaire cérébral (AVC), un enjeu majeur de santé publique et une des principales causes de mortalité et d'invalidité, requiert une compréhension approfondie de ses facteurs de risque pour des stratégies de prévention efficaces. Nous avons utilisé l'apprentissage automatique pour examiner et prédire l'occurrence d'AVC à partir des variables sociodémographiques et cliniques. L'objectif est de démêler l'interaction complexe entre ces facteurs et l'incidence des AVC, offrant des perspectives pour des interventions ciblées.

Approach: Nous avons utilisé un ensemble de données de 4 908 patients de Kaggle, une plateforme web qui accueille la plus grande communauté de Data Science au monde. Les analyses effectuées comprenaient des statistiques descriptives, la régression logistique binaire (reconnue comme une technique d'apprentissage automatique, particulièrement dans le contexte de la classification) et des techniques de bagging. Nous avons évalué la robustesse des résultats à l'aide de matrices de confusion et de courbes ROC, en analysant deux jeux de données distincts. Ces méthodes garantissent la fiabilité de notre étude et éclairent sur les facteurs affectant certaines conditions médicales.

Results: Les résultats dévoilent l’influence majeure de l'hypertension, des maladies cardiaques et du tabagisme dans la prédiction des AVC. Ils mettent aussi en lumière l'impact significatif de l'âge, des niveaux de glucose et du statut matrimonial sur la probabilité de subir un AVC. La régression logistique révèle que l'âge, l'hypertension, les maladies cardiaques, les niveaux élevés de glucose et le tabagisme sont des prédicteurs significatifs, tandis que le bagging identifie comme significatifs les niveaux de glucose et le statut matrimonial. Toutefois, la sensibilité modérée des modèles dans la prédiction des AVC pointe vers un besoin pressant d'adopter des approches plus personnalisées et de recourir à des techniques analytiques plus avancées pour améliorer la précision de la prédiction et soutenir efficacement la prévention des AVC.

Conclusion: Cette étude souligne l'impact significatif de facteurs comme l'âge et l'hypertension sur le risque d'AVC, et met en évidence le potentiel de l'apprentissage automatique en prévention. Les différences entre les résultats de la régression logistique et du bagging nécessitent une analyse plus approfondie pour optimiser les stratégies prédictives.

Impact de l'inscription à un médecin de famille sur l'utilisation des services d'urgence

Presented by: Métogara Mohamed Traoré

All Authors: *Maude Laberge1, 2, 3, Metogara Mohamed Traoré1, 2*
Author Affiliations: *1Centre de recherche du CHU de Québec-Université Laval, 2Vitam, Centre de recherche en santé durable- Université Laval, 3Centre de Recherche du CISSS de Chaudière-Appalaches*

Background and Objectives: Avec 15% de la population au Québec sans médecin de famille, l'accès aux soins primaires est un enjeu. Notre étude analyse l'impact de l'inscription à un médecin de famille sur l'utilisation des urgences entre 2016 et 2021, en tenant compte des caractéristiques des patients, et leurs motifs de visite. Elle vise à dévoiler comment l'accès à un médecin de famille peut façonner l'utilisation.

Approach: Notre étude longitudinale, s'appuyant sur les données de la RAMQ, examine 983 081 patients. Nous estimerons l'impact d'être inscrit à un médecin de famille sur l'utilisation des urgences en utilisant la méthode des différences-des-différences. Pour ce faire, nous utiliserons des patients non-inscrits mais qui deviennent inscrits et comparerons leurs utilisations des urgences à des patients qui étaient constamment inscrits à un médecin de famille pendant la période d'étude. L'inscription à un médecin de famille devra avoir été faite entre 2018 et 2019 afin d'avoir pour chaque patient deux années antérieures et deux années postérieures à l'inscription.

Results: L'étude est conçue pour estimer l'effet de l'inscription à un médecin de famille sur l'utilisation des urgences.. Nous prévoyons de découvrir une hétérogénéité significative dans les caractéristiques des patients, les motifs de visite, et les niveaux de priorité d'urgence, surtout parmi ceux acquérant un médecin de famille au cours de la période étudiée. Ces facteurs seront considérés dans les analyses afin d'éviter tout biais. Ces résultats viseront à clarifier comment l'accès à un médecin de famille peut affecter l'utilisation des services d'urgence, offrant ainsi des connaissances essentielles sur l'impact des soins primaires sur le système de santé, particulièrement en temps de crise sanitaire.

Conclusion: Cette recherche vise à estimer l'impact de l'inscription à un médecin de famille sur l'utilisation des services d'urgence. Les résultats pourraient orienter les décideurs du Québec dans l'élaboration des politiques visant à améliorer l'efficacité des soins de santé, et à une meilleure gestion des ressources en santé.

Patient and Provider Perspectives on a Primary Care Telemedicine Preconsultation Tool for Older Adults

Presented by: Alexandre Tremblay

All Authors: *Nadia Sourial1, 2, Alexandre Tremblay1, Élise Develay1, Djims Milius1, Éric Tchouaket3, Colette Dufresne-Tassé2, Vladimir Khanassov4, Géraldine Layani1, 2, Claire Godard-Sebillotte4, Amélie Quesnel-Vallée4, Yves Couturier5, Audrey Plante1, Marie-Thérèse*
Author Affiliations: *1CRCHUM, 2Montréal University, 3Université du Québec en Outaouais, 4McGill University, 5Sherbrooke University, 6CIUSSS Est-de-l'île-de-Montréal, 7Laval University*

Background and Objectives: Pre-consultation telemedicine tools are considered a promising way to support health providers and older adults in identifying multiple and often complex needs. However, few studies have evaluated telemedicine tools targeting older adults and healthcare professionals. This study compared the perspectives of patients and providers using ESOGER, a novel multidimensional assessment tool for older adults.

Approach: Qualitative interviews were conducted with older adults (n=19) and health providers (n=17) in 4 family medicine clinics (2 rural and 2 urban) in Quebec, Canada. The recruitment of older adults was diversified according to age, gender, and comorbidity. We completed a thematic inductive-deductive analysis of the interviews using the Dedoose software. Initial coding was based on the RE-AIM and Proctor et al. (2019) frameworks for implementation and evaluation.

Results: We divided the results into 4 categories: acceptability, appropriateness, efficacy and sustainability. The analysis showed that the ESOGER tool was acceptable, and both groups appreciated the use of the telephone as a means of administration for its familiarity and ease of use (acceptability). Both groups also agreed that the ESOGER provided useful information on mental and social needs, and not so much for physical needs as these were generally already known (appropriateness). Also, older adults found that the tool could help in preparing for their consultation, while healthcare providers noticed that it may help in setting care agendas and the general management of patients (efficacy). Finally, ESOGER appeared to be particularly appreciated for both groups when the responses are discussed explicitly during the consultation (sustainability).

Conclusion: Both groups saw benefits in using a preconsultation telemedecince tool such as ESOGER, particularly in its use to assist in talking about mental and social need. Nevertheless, this tool could benefit from adaptations regarding the needs of older adults and its use in various clinics.

Challenges to engage primary care providers in national surveys: Strategies identified from the OECD Patient-Reported Indicators Survey (PaRIS) in Canada

Presented by: Vanessa T. Vaillancourt

All Authors*: Walter Wodchis1, Emily Hamovitch1, Udoka Okpalauwaekwe2, Vanessa T Vaillancourt3, Andrea Gruneir4, Charlotte Schwarz5, Lanting Cheng6, Leanne Kosowan7, Mary Helmer-Smith8, Vijay Kunaratnam1, Shelley Doucet9, Emily Gard Marshall10, Gayle Halas11, Fazle Sha*

Author Affiliations: *1Institute of Health Policy, Management and Evaluation, University of Toronto , 2Department of Academic Family Medicine, University of Saskatchewan, 3Department of Family and Emergency Medicine, Université de Sherbrooke , 4 Department of Family Medicine, College of Health Sciences, University of Alberta, 5Department of Nursing and Health Sciences, University of New Brunswick, 6Centre for Health Services and Policy Research, University of British Columbia, 7Department of Family Medicine, University of Manitoba, 8Centre for Health Services and Policy Research and School of Nursing, University of British Columbia, 9Centre for Research in Integrated Care, University of New Brunswick, 10Community Health and Epidemiology, University of Saskatchewan, 11Rady Faculty of Health Sciences, University of Manitoba, 12 Primary Healthcare Research Unit, Memorial University of Newfoundland, 13University of New Brunswick, 14Department of Family and Community Medicine, University of Missouri*

Background and Objectives: Even though most healthcare services are provided in primary care, the systematic and routine collection of patient-reported experiences and outcomes is rare. Canada is one of 20 countries involved in the OECD Patient-Reported Indicators Survey (PaRIS), an initiative to report on patient-reported outcomes and experiences of people living with chronic conditions and receiving primary care. Based on our experience with this study, we share our successes, opportunities for change, and lessons learned.

Approach: The PaRIS-Survey study was a pan-Canadian two-phase cross-sectional study within primary care practices. Family physicians and nurse practitioners who had a patient panel and provided primary care were included. The provider questionnaire was developed based on the framework of the PaRIS-OECD survey. It covers practice characteristics and services provided. The research teams or provincial and local organizations proposed providers to participate by phone, email, or fax. Each province shared its experience recruiting providers with the national coordinator via virtual meetings, e-mails, or logbooks and a qualitative content analysis was conducted. Descriptive analyses were used to report the quantitative data.

Results: Across the seven provinces that collected data in the prescribed time frame, 65 practices participated, and response rates varied from 3% to 62%. Sixty-five percent were family physicians, and 22% were nurse practitioners. The mean completion time was 21 minutes. More than half were working in a group practice with their own patients, and two-thirds of providers were practicing in a city. Financial incentives, minimized burden, strong relationships, and dissemination and recruitment tools facilitated provider recruitment and participation. Issues related to clinics' priorities, resources, ethics, organizational aspects, government requirements, and technical inabilities were barriers to participation. Recruiting providers was a major challenge for all the provinces, requiring significant time and resources.

Conclusion: This study identified strategies to facilitate the recruitment and participation of primary care providers in surveys. Our study aligns with health system performance evaluation, contributing to the ongoing effort to enhance primary care performance and thereby fostering a more comprehensive understanding of health system effectiveness.

Exploring the drivers of potentially avoidable emergency room visits by community-dwelling older adults from historically marginalized groups in New Brunswick and Ontario

Presented by: Katelyn Wang

All Authors: *Maya Gibb1, Katelyn Wang2, Sharon Johnston3, Eunice Hammond1, Karyle Nama Flores4, Krystal Kehoe MacLeod1, 2, 5, Kavish Chandra6*
Author Affiliations: *1Ottawa Health Research Institute, 2University of Ottawa, 3Institut du Savoir Montfort, 4University of New Brunswick, 5Bruyère Research Institute, 6Dalhousie University*

Background and Objectives: Hospitals across Canada are dealing with high emergency department (ED) use rates amidst an unprecedented health human resource shortage. This project explores the reasons behind the ED visits of older adults in Saint John, New Brunswick (NB) and Ottawa, Ontario (ON). Our aim is to better understand the drivers of potentially avoidable ED visits among linguistic and ethno-cultural minority groups, especially individuals whose primary language is not English.

Approach: This cross-provincial study seeks to understand how older adults' care experiences and decision-making processes about going to the ED are shaped by social and structural inequities. Older adults (65+) and their caregivers were recruited while seeking care in two EDs in NB and one ED in ON (n=120) using posters and in-person recruitment. To identify barriers to care, surveys, short answer questions, and retrospective chart reviews were analyzed using reflexive thematic analysis and descriptive and inferential statistical analyses to compile case profiles of patients who self-identified as belonging to a minority group and had a potentially avoidable ED visit.

Results: Our quantitative findings highlight that having a family doctor does not guarantee timely access to care or ED avoidance. Over 80% of participants in both provinces had a family doctor but still presented to the ED. Over 90% of participants went to see their family doctor for care, sought out at least one other care service, and still ended up seeking care in the ED. Other findings included a significant relationship between self-reported income and overall health (Spearman's rho=0.53, $p<0.05$). Qualitative thematic analysis of short answer responses revealed challenges with transportation, a preference to receive care in one's primary language both in community settings and the ED, and the lack of availability and access to family doctors in what patients perceive as a timely manner.

Conclusion: This study offers important insight into how social and structural inequities shape care experiences for older adults leading to potentially avoidable ED visits in NB and ON. Our findings will inform hospital and clinic decision-making, as well as advocacy efforts for community-based solutions to assist with the identified equity barriers.

Understanding Performance Feedback Orientation among Primary Care Physicians: A Partial Least Squares Path Modeling Analysis

Presented by: Ruoxi Wang

All Authors: *Ruoxi Wang1, Laura Desveaux1, Braeden Terpou1, Simona C. Minotti1*
Author Affiliations: *1Trillium Health Partners*

Background and Objectives: Audit and Feedback (A&F) is a promising quality improvement strategy, yet its uptake is often suboptimal. While recipient characteristics are acknowledged as an important driver of uptake, little attention has been paid to understanding these characteristics and their mechanisms of action. We aimed to develop and validate an integrated model that delineates the cognitive process through which physicians engage with the idea of A&F as an improvement strategy, a precursor to uptake of A&F reports.

Approach: We conducted a cross-sectional survey among Ontario primary care physicians between May-December 2022. The survey measured six recipient characteristics based on feedback orientation theory, control-value theory, and regulatory focus theory. These included feedback accountability (commitment to act on feedback), feedback self-efficacy (perceived confidence in acting on feedback), feedback value (perceived value of acting on feedback), feedback utility (perceived usefulness of feedback), prevention focus (inclination to avoid mismatches to desired outcomes) and change discrepancy (perceived need for change). Assuming feedback accountability as outcome and all variables as latent constructs, we applied partial least squares path modeling to test the hypothesized pathways.

Results: Across the 206 survey respondents, feedback utility fully mediated the positive association of feedback self-efficacy with feedback accountability (indirect effect: $\beta = 0.17$, 95% Confidence Interval [CI]: 0.10, 0.25; direct effect: $\beta = 0.03$, 95% CI: -0.11, 0.16, not significant); whereas it partially mediated the positive association of feedback value with feedback accountability (indirect effect: $\beta = 0.25$, 95% CI: 0.17, 0.36; direct effect: $\beta = 0.22$, 95% CI: 0.09, 0.35). Change discrepancy was positively correlated with feedback value ($\beta = 0.49$, 95% CI: 0.37, 0.60). Prevention focus had a negative but not statistically significant association with feedback utility ($\beta = -0.05$, 95% CI: -0.17, 0.11).

Conclusion: By demonstrating the essential mediating role of feedback utility, this novel work highlights that physicians' engagement with the idea of A&F is a multi-step cognitive process. More work is needed to understand the effect of prevention focus and how it manifests in the context of A&F.

Understanding Whether and How a Digital Health Intervention Improves Transition Care for Emerging Adults Living with Type 1 Diabetes: Emerging Results from Phase 2 of The Realist Evaluation

Presented by: Ruoxi Wang

All Authors: *Noor El-Dassouki1, Geneviève Rouleau2, Ruoxi Wang3, Meranda Nakhla4, Laura Desveaux3, Marley Greenberg5, Anne-Sophie Brazeau6, Madison Taylor1, Rayzel Shulman7, Gillian Lynn Booth8, Joseph A Cafazzo1*
Author Affiliations: *1University Health Network, 2Université du Québec en Outaouais, 3Trillium Health Partners, 4Montreal Children's Hospital, 5University of Toronto, 6McGill University, 7The Hospital for Sick Children, 8Unity Health Toronto*

Background and Objectives: While digital health interventions for type 1 diabetes (T1D) self-management are a promising strategy to help emerging adults living with T1D transition from pediatric to adult care, it remains unclear which elements work, how, and for which groups. We aimed to evaluate the implementation of a multi-element text message-based intervention to 1) identify the effective elements and associated mechanisms; and 2) determine the individual characteristics that influence the implementation process.

Approach: This sequential realist evaluation was embedded alongside a larger randomized controlled trial (RCT). In Phase 1, we conducted a document analysis to develop a program theory that outlines the hypothesized relationships among individual-level contextual factors (C), intervention components and features (I), mechanisms (M), and outcomes (O), with special attention paid to user engagement. In Phase 2, we performed semi-structured realist interviews with the RCT's intervention-arm participants to explore and validate the hypothesized C-I-M-O configurations.

Results: Phase 1 identified seven mechanisms and nine direct I-M configurations. In Phase 2, we completed 10 interviews and validated six I-M configurations. As hypothesized, we found that: 1) participants considered the intervention useful and easy to use; 2) the self-management suggestions, transition support, stress management, and reminder elements worked as expected to improve knowledge and outcome expectancies, alleviate negative emotions, and remind actions. New, unanticipated insights emerged, including: 1) the intervention's self-management suggestions operated via more mechanisms than initially hypothesized (i.e., reinforcement and behavioral cueing were identified); and 2) the mediating role of knowledge and reinforcement on other mechanisms (e.g., self-efficacy, negative emotions, outcome expectancies) suggested a chain of mechanisms.

Conclusion: Most elements of the digital health intervention worked as expected, with interviews providing key insights into how these mechanisms occurred in a real-world context. Identifying the unanticipated interaction between mechanisms offers valuable insights to understand how the impact of digital health interventions may be realized (or not).

Development of an information items dictionary inspired by common data models to support research data access requests

Presented by: Carrie-Anne Whyte & Ali Anis & Erica Brown

All Authors: *Mark McGilchrist1, 2, 3, 4, Ali Anis4, 5, Carmen La4, 5, Algorithm and Harmonized Data (AHD) Working Group 4, Jean-Francois Ethier2, 3, 4, Carrie-Anne Whyte4, 5, Data Access Support Hub (DASH) Working Group4*
Author Affiliations: *1Health Informatics Centre, University of Dundee, 2Department of Medicine, Université de Sherbrooke, 3Groupe de recherche interdisciplinaire en informatique de la santé (GRIIS), 4Health Data Research Network Canada , 5Canadian Institute For Health Information*

Background and Objectives: Health Data Research Network Canada (HDRN Canada)'s Data Access Support Hub (DASH) provides services to facilitate multi-regional research. DASH is streamlining the data access process by developing an information items (InfoItems) dictionary, to better support researchers in requesting multi-regional data. InfoItems consists of a label and definition that represent a semantic sourced from an ontology (e.g., "human birth date" from a demography ontology). This allows for a standardized and shareable means to express data requirements.

Approach: HDRN Canada's network of 13 provincial/territorial and pan-Canadian data centres worked to understand the variation in the types of data and the data sources available across Canada. Inspired by common data models (CDMs) like those from the Observational Medical Outcomes Partnership (OMOP) and the Canadian Network for Observational Drug Effects (CNODES), approximately 60 InfoItems were developed by HDRN Canada. As a pilot exercise, four DASH data centres mapped their data assets to the InfoItems to ensure InfoItems are relevant to the Canadian health data context. This laid the foundation for InfoItems as a basic data harmonization mechanism.

Results: The new data dictionary containing InfoItems allows for the organization and standardization of data assets across DASH data centres. Researchers can use the data dictionary to obtain and document specific details about a project's data requirements, such as the availability of various data and information across multiple provinces/territories, to be included as part of their data access request. The InfoItems dictionary is an important step in streamlining the process for requesting data and encouraging researchers to undertake multi-regional research in Canada. This resource can also safeguard the quality of the results during the analysis of data, as well as potentially streamlining the extraction of data into existing data models (e.g., CDMs).

Conclusion: HDRN Canada is creating multiple, centralized resources that standardize data access processes across multiple provinces/territories, organizations, and data sources. The InfoItems dictionary is foundational to supporting data access requests from researchers in Canada. Further process improvements are anticipated to address user experience feedback and to promote quality research.

How DASH enables external data linkage to support multi-regional research

Presented by: Carrie-Anne Whyte & Erica Brown & Ali Anis

All Authors: *Mark McGilchrist1, 2, 3, 4, Data Access Support Hub (DASH) Working Group2, Carmen La2, 5, Carrie-Anne Whyte2, 5, Ali Anis2, 5, Jean-Francois Ethier2, 3, 4*
Author Affiliations: *1Health Informatics Centre, University of Dundee, 2Health Data Research Network Canada , 3Department of Medicine, Université de Sherbrooke, 4Groupe de recherche interdisciplinaire en informatique de la santé (GRIIS), 5Canadian Institute For Health Information*

Background and Objectives: Health Data Research Network Canada (HDRN Canada) supports transformative and world-leading multi-regional health data use and health research. There are over 13 provincial/territorial and pan-Canadian data centres part of the network. The data centres collectively hold more than 500 data assets. While the network and data centres actively seek opportunities to add new administrative or clinical data assets, there will always be a need to link to external data, on a per-project basis.

Approach: Data from the network's data centres can be linked to external sources of data. This includes but is not limited to data from a researcher's own clinical trial or other research study; data from registries including disease or population-based; and data from other organizations or custodians. To clarify and streamline access to and linkage of data assets external to the network, the data centres were widely consulted to identify, model and harmonize/map existing local linkage processes and other requirements that exist for researchers when requesting access to data from multiple custodians.

Results: Local processes for linkage, including necessary agreements and approval steps are now modelled and documented, and available to researchers and the data centres as a resource. The modelled processes cover cases where linkage is done both within and outside of the network. This information helps streamline data access and linkages to data assets across the network and externally.
The network is presently working on 11 data access requests that involve linkage to external data. Three of these are currently in the data preparation stage, with the provision data expected by spring 2024.

Conclusion: Collaboration with data centres, affiliated organizations, and researchers are foundational in the development of linkage models at HDRN Canada. These models play a critical role in making linkages across data sources within Canada more efficient and standardized. Data linkages support the utility of data and health innovation.

Understanding the "Vaping Products Labelling and Packaging Regulations" Act: An Analysis of Competing Problem Definitions

Presented by: Michelle Wijesinghe & Yusra Naqvi & Mirianna Georges

All Authors: *Yusra Naqvi1, 2, Michelle Wijesinghe1, 2, Mirianna Georges1, 2*
Author Affiliations: *1Faculty of Health Sciences, McMaster University , 2Degroote School of Buisness, McMaster University*

Background and Objectives: Originally popularized as a harm-reduction tool for smoking cessation, vapes gained popularity among non-smokers; notably among teens, thereby posing significant health risks. Public pressure and health concerns have demanded a policy response. To address this issue, The “Vaping Products Labelling and Packaging Regulations” Act of 2019 aims to standardize packaging in displaying health impacts. This research aims to explore competing definitions of the policy problem, why this approach was adopted, and its implications.

Approach: The Houston & Richardson Competing Problem Definition Framework guided the analysis of the Act. This framework, focused on the agenda-setting phase of policy-making, recognizes that diverse problem definitions compete for the attention of policymakers. A comprehensive analysis of policy documents was completed to interpret problem definitions, associated solutions and success factors. These were then tested against the framework to determine which problem definition best encapsulates issues outlined in the Act. By using this framework, we acknowledge the continual evolution of this issue’s framing and context, as new literature is made public surrounding vaping guidelines and health impacts.

Results: Using the Houston & Richardson framework, we determined four problem definitions: behavioural, regulatory, technological and corporate greed. The behavioural definition considers the potential for addiction and the sharp uptake among the youth population. The regulatory definition focuses on the consistency and standardization of packaging and labelling components which can inform the public of health risks. The technological definition focuses on further research and development into safer vaping devices and liquids. The corporate greed definition considers vaping’s original function as a harm reduction tool for smokers attempting smoking cessation, and that public benefits outweigh public risk. Using the Houston & Richardson framework, we additionally rated different attributes of the problem definitions to understand each one’s suitability as a policy response.

Conclusion: Examining the definitions, we determined the regulatory problem definition was the approach used in the legislation to allow for personal autonomy, comprehensive regulations, and informed risk. While the regulatory definition embodied the majority perspective, it is considered an incomplete solution as concerns presented by other definitions weren’t adequately addressed.

Rural Nurse Leader Perceptions of Practice Environment Empowerment Structures

Presented by: Ariel Wilcox

All Authors: *Judith Scanlan1, Ariel Wilcox2*
Author Affiliations: *1Advisor, 2Masters Student*

Background and Objectives: Current and ongoing nursing shortages impact the access to and quality of patient care, especially in rural populations. Improving nurse retention is therefore an important aspect of healthcare transformation. This retention can occur by enhancing job satisfaction, by enriching empowerment structures, and by increasing organizational support for nurse leaders. This proposed research will study nursing leaders' understanding of empowerment and how this can be optimized to enhance recruitment and retention in rural communities.

Approach: A qualitative descriptive design will be used. Knowledge will be generated from expert nursing leaders using convenience and snowball sampling techniques via questionnaire and interview format. 10 interviews are anticipated. Results will be analyzed using constant comparative content analysis. Participants will be asked to richly describe the context in which rural nurse leaders work; report how they understand and experience empowerment; and provide suggestions for creating empowering practice environments. Participants will be asked how these, plus additional strategies, may help reduce nurse role stress and ambiguity, increase positive emotions and job satisfaction, and support nurse leadership and nursing staff retention.

Results: Manitoba has one of the highest rural populations in Canada. Understanding nurse leader empowerment is crucial to gain insight into future retention of nurse leaders. We anticipate that this planned study will demonstrate the limited ways which rural nurse leaders understand empowerment in their workplaces. This will be illustrated through a lack of staff retention due to decreased job satisfaction related to the lack of perceived empowerment. Results may include increased sense of empowerment and job satisfaction, with reduction in turnover. By learning from experiences and descriptions of rural nurse leaders' understanding of empowerment, knowledge from this study can inform and create empowered practice environments by reducing nurse role stress and ambiguity, increasing positive emotions, increasing job satisfaction, and supporting retention.

Conclusion: By understanding outcomes of empowerment's association with job satisfaction and retention, potential exists for introductions of empowerment in rural nurse leaders' workplaces. Findings can inform policies and guide potential program and/or educational demands in facilitating/encouraging rural nurse leader retention.

Exploring the impact of a healthy food incentive on the health and wellbeing of Indigenous participants with type 2 diabetes: A qualitative description

Presented by: Kienan Williams

All Authors: *Kienan Williams1, Jackie Bromely2, Kari Meneen3, Patrick Lightning4, Anika Sehgal5, Sara Scott5, Yun Lee6, Richard Oster1, 6*
Author Affiliations: *1Alberta Health Services, 2Awo Taan Healing Lodge Society, 3OKAKI Health Intelligence, 4Ermineskin Cree Nation, 5University of Calgary, 6University of Alberta*

Background and Objectives:): Indigenous health research has often lacked meaningful community involvement, resulting in paternalistic approaches and limited benefits to Indigenous communities. The 'FoodRx' randomized controlled trial (RCT) in Alberta addresses food insecurity and hyperglycemia among adults with type 2 diabetes (T2D). RCTs tend to reflect dominant research norms, values, and meanings of health. Therefore, we explored the experiences of Indigenous participants who completed the trial, focusing on perceived health and wellbeing changes.

Approach: A six-month parallel-group RCT was implemented to examine the effectiveness of a healthy food incentive program. Individuals identified from urban and rural clinics, including those serving Indigenous populations, were randomly assigned to an incentive (received a $1.50/day/household member, 12-month incentive at a partnering grocery store line) or comparison group. All participants received standard nutrition teaching from a healthcare professional. Indigenous participants who completed the trial were purposively recruited to a qualitative descriptive study to learn about their experiences. Semi-structured interviews were conducted and data was analyzed iteratively using directed content analysis and continuous engagement with an Indigenous Advisory Board.

Results: Fourteen participants were interviewed from the incentive (n=8) and comparison (n=6) groups to reach data saturation. Through preliminary analysis, participants described the ways in which the FoodRx study contributed to them achieving improved wellbeing. Prior to entering the study, participants described financial constraints affecting food preferences and choices, including the inability to incorporate foods to manage their diabetes. Participants reported that the healthy food incentive emerged as a source of financial relief that allowed them to procure culturally relevant, nutritious foods that assisted in improved glycemic control and also intertwined with the spiritual and emotional dimensions of Indigenous wellbeing. Acknowledging the complex socio-political landscape of food insecurity, participants revealed improved physical wellbeing, emphasizing the transformative potential of consistent access of healthy food within Indigenous communities.

Conclusion: Our qualitative findings reveal that a healthy food incentive provided crucial support for Indigenous participants, emphasizing the efficacy of FoodRx in enhancing wellbeing through culturally tailored interventions for adults with T2D.

A mixed methods process evaluation of a consultative, collaborative outpatient palliative care clinics for patients with End-Stage Kidney Disease on dialysis

Presented by: Aria Wills

All Authors*: Leila Cohen1, Adrianna Bruni1, Shreya Rauthu2, 3, Janet L. Davis1, Aria Wills2, Grace Warmels1, Sarina R. Isenberg2, 3*
Author Affiliations: *1The Ottawa Hospital, 2Bruyère Research Institute, 3University of Ottawa*

Background and Objectives: End-stage kidney disease (ESKD) is a life-limiting illness with high symptom burden, and worsened quality of life. Despite established benefits of palliative care (PC), patients with ESKD on dialysis experience inequitable access when compared to patients with cancer. Research is required to identify the optimal model for provision of early outpatient PC for patients with ESKD on dialysis. This study aims to explore a novel outpatient PC clinic for patients with ESKD on dialysis.

Approach: We performed a process evaluation of a novel consultative, collaborative outpatient PC clinic for patients with ESKD on dialysis in Ottawa. Using a process evaluation framework, we developed a logic model of the clinic. Clinic success was determined by achievement of logic model outcomes, alongside program performance in five process evaluation domains: fidelity, patient experience, reach, recruitment, and context. Evaluation inputs entailed (1) a chart review, including patient demographics, care processes, and outcomes and (2) qualitative interviews exploring clinic experiences of healthcare providers (HCPs), patients, and caregivers. Analysis entailed descriptive statistics, thematic qualitative analysis, and mixed methods triangulation.

Results: The PC clinic received 49 referrals from 2023 to 2024 of which 43 (87.8%) consults were completed. Seven (16.3%) patients were transitioned from the clinic to community PC. 18 (41.9%) patients died across care settings including 10 in acute care hospital, 5 at home/care facility, and 3 in hospice/PC unit.
14 HCPs, four patients, and seven caregivers were interviewed. Overall, participants affirmed the benefits patients received from PC. HCPs reported care was of good quality and supported the continued development of this service. Patients experienced support for quality of life and optimization of goal-concordant care. Caregivers' needs, including support in symptom management, were also met. PC visits occurring during dialysis sessions were perceived as important, despite consequent privacy limitations.

Conclusion: Results of the clinic evaluation demonstrated successful processes of care and a promising impact on desired outcomes of the logic model. Study findings will inform early outpatient PC for patients with ESKD and guide future development of PC clinics for other types of organ failure.

A mixed methods process evaluation of a consultative, collaborative outpatient palliative care clinic for patients with End-Stage Liver Disease

Presented by: Aria Wills

All Authors: *Grace Warmels1, Erin Kelly1, 2, Aria Wills3, Adrianna Bruni1, Shreya Rauthu2, 3, Leila Cohen1, Sarina R. Isenberg2, 3*
Author Affiliations: *1The Ottawa Hospital, 2University of Ottawa, 3Bruyère Research Institute*

Background and Objectives: End-stage liver disease (ESLD) is a life-limiting illness with high symptom burden. While liver transplant is curative, lack of access to and ineligibility for transplant necessitates palliative care (PC) support. Patients with ESLD experience less access to PC than patients with cancer. The optimal model for provision of early outpatient PC to patients with ESLD remains unknown. This study evaluated a novel consultative, collaborative PC clinic model for patients with ESLD in Ottawa.

Approach: We performed a process evaluation of the PC clinic by developing a logic model of the clinic and assessing five process evaluation domains including fidelity, patient experience, reach, recruitment, and context. Clinic success was determined by achievement of outcomes of the logic model developed of the clinic, and performance in process evaluation domains. Using a mixed methods approach, evaluation leveraged a chart review describing patient demographics, care processes, and outcomes and qualitative interviews with healthcare providers (HCPs), patients, and caregivers regarding their experiences with the clinic. Analysis entailed descriptive statistics, thematic analysis, and mixed methods triangulation.

Results: Thirty-nine new consults (66.1%) were completed by the PC clinic from 2023 to 2024 of 59 total referrals. 25.6% of patients seen in the clinic were transitioned to community PC. 33.3% of patients have died - 23.1% acute care hospital, 38.5% home/care facility, and 30.8% hospice/PC unit.
Five HCPs, three patients, and nine caregivers were interviewed. All participants perceived benefit from the PC clinic, agreeing access to early PC should continue. Patients reported improved quality of life, and caregivers felt supported in future planning and prepared for disease progression. PC addressed needs that were previously unmet by the hepatology HCPs alone (e.g., pain management). In-person appointments were challenging for patients with mobility difficulties. Some participants perceived referrals as occurring too early in the disease trajectory.

Conclusion: Evaluation of the clinic demonstrated successful processes of care and a promising impact on desired outcomes of the logic model. Results of this study will inform current non-cancer outpatient PC clinics, and guide future development of PC clinics for other types of organ failure.

“It is the right thing to do”: Building a rooming-in program for parents and babies at risk of Neonatal Abstinence Syndrome

Presented by: Osnat Wine

All Authors: *Matt Hicks 1, Osnat Wine1, 2, Vera Caine3, Deborah McNeil2, 4*
Author Affiliations: *1University of Alberta, 2MNCY SCN, Alberta Health Services, 3University of Victoria , 4University of Calgary*

Background and Objectives: A rooming-in model of care (keeping mothers and infants together) is an evidence-based approach for supporting mothers involved in substance use during pregnancy and babies at risk of Neonatal Abstinence Syndrome (NAS). Implementation of this model of care is complex and challenging, requiring a shift in established practices and culture in acute care settings. We illustrate the conditions required to establish and sustain a rooming-in program.

Approach: Using the lens of team science provides insights in building effective implementation teams within and across sectors. Through a case study focused on a program that implemented a NAS rooming-in model, we explored the processes and essential components involved in the team’s journey of establishing the program. Informed by the Consolidated Framework for Implementation Research and the Collaborative Research Framework we conducted 6 semi-structured interviews with the champions and founders of the program, as well as we observed and reviewed team meetings and program documents. We used thematic analysis in combined inductive and deductive processes.

Results: At the heart of the program implementation was a dedicated, committed, and passionate team with strong relationships across stakeholders. The innovation aligned with the hospital mandate of promoting social justice and equity.
Program growth processes involved extending the team and engaging in co-learning with staff. Processes focused on team building and expanding individual knowledge and shift in attitudes to provide hopeful and evidence informed care. It was essential for the program implementation to establish trust between families and staff, expand partnerships with parents and develop joint responsibility with those involved and those most impacted by the program. Observing success was crucial for progression. Additionally, the core team led change through constantly supporting staff and families and engaging in inclusive reflective practices.

Conclusion: The program success builds upon the number of patients impacted, the associated cost savings, and the significance of providing team-based meaningful, ethical, and hopeful care for families who experience structural vulnerabilities. The journey to establish a rooming-in program is complex and requires attention to team processes and dynamics.

The Network for Integrated Care (NICE) Canada - the Knowledge Mobilization Hub for the IHSPR THINC Initiative

Presented by: Walter Wodchis

All Authors: *NICE Canada Team1, Sharon Armstrong2, Richard Lewanczuk3, Mathieu Isabel1, Walter Wodchis1, Jodeme Goldhar1, Maureen Smith 4*
Author Affiliations: *1University of Toronto, 2University of Alberta, 3Alberta Health Services, 4Ontario SPOR Support Unit*

Background and Objectives: The CIHR Institute for Health Services Research (IHSPR) Transforming Health with Integrated Care (THINC) initiative aims to improve our understanding of how to implement, evaluate, adapt, spread and scale evidence-informed integrated care policies and interventions. The purpose of this poster is to demonstrate how the THINC Knowledge Mobilization (KM) Hub will tie together the multiple THINC projects to ensure that the new knowledge is amplified and impacts on the delivery of care across Canada.

Approach: The THINC KM Hub - the Network for Integrated Care Excellence (NICE) Canada - will create a collective community through virtual and in person events including webinars, workshops, policy dialogues, masterclasses, policy briefs and evidence syntheses to build capacity and to translate, exchange and mobilize knowledge to accelerate the implementation of integrated care practices across Canada. NICE Canada will host an online resource library produced by THINC teams and will support dynamic shared creative and interactive online collaborative spaces amongst members of a broad community interested and engaged in the advancement of integrated care knowledge and practice.

Results: The potential impact of the NICE Canada knowledge mobilization hub is expected to be meaningful, widespread and substantive. It will ensure that the THINC program achieves more than the sum of the individual components and individual research projects.

Conclusion: NICE Canada will develop and support an initiative-wide learning community, amplify KM activities, foster collaboration, build capacity, and advance collective impact across the THINC initiative components.

The Learning Health System Action Framework

Presented by: Walter Wodchis

All Authors: *Laura Rosella1, John Lavis2, Laura Desveaux1, Robert Reid1, Walter Wodchis1, Kerry Kuluski1, Nakia Lee-Foon1*
Author Affiliations: *1Institute for Better Health, 2McMaster University*

Background and Objectives: Health care systems across the world experience pervasive gaps in the speed with which high quality evidence is generated, implemented and refined. A Learning Health System (LHS) approach that blends research with health care operations is a potential antidote. This paper builds on existing LHS frameworks to deepen our practical understanding of the research-health systems operations interface and to provide actionable insights on how to realize a LHS in practice.

Approach: A narrative review was used to conduct a comprehensive overview of existing LHS frameworks and synthesize knowledge on the LHS. We focused on review articles published in the last 10 years in peer-reviewed or grey-literatures and captured key constructs, evidence types and implementation considerations. Iterative discussions amongst authors achieved consensus on a parsimonious set of activities essential to implementing an LHS. The “action framework” was reviewed with a 20-person LHS working group comprised of applied researcher leaders, system leaders, and expert patients. The framework was revised and subsequently reviewed by a larger group of similar stakeholders across Ontario.

Results: We present an LHS action framework that describes how research and health care operations are linked and enacted in a comprehensive LHS approach to advance population health and health equity. The framework is based on 5 essential action-oriented gears necessary for successful implementation of an LHS: Analytics and Population Insights; Evidence Synthesis; Patient, Caregiver and Provider Co-design; Implementation; and Evaluation, Feedback and Adaptation. The framework also includes four representative health and social system ‘sectors’ that provide important health-promoting services. Additional elements that influence the successful implementation are represented by Fuel and Accelerants or Moderators and Brakes respectively.

Conclusion: Health systems seeking to implement an LHS approach can use this framework to identify capabilities necessary to enact the learning elements, including key questions and methods, to ensure a systematic approach to learning and achieving equity-centered quadruple aim metrics.

Where are they going, and what can we do to keep them? Intent to leave among nurses in BC

Presented by: Sandra Wu

All Authors: *Tarya Morel1, Mycal Barrowclough1, 2, Sandra Wu1, ShuYi Chua1*
Author Affiliations: *1British Columbia Nurses' Union, 2University of British Columbia*

Background and Objectives: Health human resource planning depends on certain assumptions. Forecasting models have traditionally focused on supply and demand expectations; more recent models integrate greater complexity, considering variables such as retirement age, movement to management, expected parental leaves, and attrition from the profession. A sudden increase in the attrition rate of nurses risks triggering a feedback loop in which units become understaffed, creating increasingly difficult workplace environments, thereby prompting more nurses to exit the profession.

Approach: This study describes responses to a subset of questions on a survey of nearly 15,000 nurses in British Columbia. Participants expressing intent to leave were asked what other professional options they were considering, and what changes they would need to keep them in nursing. We used thematic analysis to identify themes and sub-themes of participant responses.

Results: Fewer than one in five nurses expressed intent to stay in the profession for more than two years. Participants cited a wide variety of other professional options available to them; the most commonly cited category was 'anything but nursing'.
When asked what they needed to stay in nursing, participants described improvements in compensation, safe staffing, work/life balance, workplace culture, physical and psychological safety, and opportunities for advancement.

Conclusion: Nurses, especially younger nurses with multiple family responsibilities, are keenly aware of the many options available to them, and are increasingly unwilling to tolerate unsafe and inflexible work environments. Governments and employers will need to meet the needs of nurses to ensure access to safe, quality healthcare for all Canadians.

Anticoagulant Use and Short-Term Mortality in Long Term Care Home Residents After a Fall

Presented by: Christina Yin

All Authors: *Celeste Fung1, 2, Manish Sood3, 4, Ramtin Hakimjavadi3, Deborah Siegal3, 4, Maren Kimura4, Christina Yin4, 5, Mary Scott4, 6, Kerstin de Wit7, 8, 9, Amy Hsu2, 5, Céline Girard4, 10, Monica Sobala1, Daniel Kobewka4, 5, Peter Tanuseputro3, 4, 5, 10*

Author Affiliations: *1 St. Patrick's Home of Ottawa, 2Department of Family Medicine, University of Ottawa, 3Department of Medicine, University of Ottawa, 4Ottawa Hospital Research Institute, 5Bruyère Research Institute, 6The Public Health Agency of Canada, 7Department of Medicine, McMaster University, 8Departments of Emergency Medicine and Medicine, Queen's University, 9Department of HEI, McMaster University, 10ICES uOttawa*

Background and Objectives: Falls are common for long-term care (LTC) residents living with severe frailty leading to mortality, morbidity, and higher health care costs. Many LTC residents are on anticoagulants to prevent or treat thromboembolic events. Despite their common use, it remains unclear if anticoagulant use leads to increased short-term mortality after a fall. We aim to determine if anticoagulant use is associated with increased mortality among LTC residents who fall.

Approach: We conducted a retrospective cohort study using population-level administrative health data of older adults (≥65 years) residing in LTC facilities between January 1, 2010, and December 1, 2022, who were transferred to emergency departments for any fall or trauma related condition. Participants were followed for at least three months after a transfer. The exposure was the use of direct oral anticoagulants (DOACs) or warfarin. The primary outcome was mortality within 30 days of transfer. We used multivariable hierarchical logistic regression to examine the association between the use of DOACs or warfarin and 30-day mortality.

Results: There were 56,419 individuals transferred to the hospital for a fall or trauma, of whom 9,734 were taking DOAC or warfarin. The mean (standard deviation) age of the study population was 85.6 (7.6) years and 70.4% were female. We found that there was no significant difference in 30-day mortality between anticoagulant users and nonusers (Odds ratio: 0.98; 95% confidence interval: 0.90 - 1.06).

Conclusion: Anticoagulant use is common among LTC residents who experience falls. After adjusting for comorbidities, the use of anticoagulants does not appear to be associated with short-term mortality. Our findings can inform decisions about when hospital transfer after a fall is appropriate.

Redeployment Among Primary Care Nurses During The COVID-19 Pandemic: A Qualitative Study

Presented by: Gilian Young

All Authors: *Emilie Dufour1, Leslie Meredith2, Cheryl Cusack3, Gillian Young2, Crystal Vaughan4, Sarah Spencer5, Eric Wong2, Shabnam Asghari6, Emily Gard Marshall1, Lindsay Hedden5, Annette Elliott-Rose7, Stan Marchuk8, Julia Lukewich4, Maria Mathews2, Donna Bulman4*
Author Affiliations: *1Department of Family Medicine, Dalhousie University, 2Department of Family Medicine, Schulich School of Medicine and Dentistry, Western University, 3Community Health Nurses of Canada, 4Faculty of Nursing, Memorial University, 5Faculty of Health Sciences, Simon Fraser University, 6Faculty of Medicine, Memorial University, 7I.W.K. Health Centre, Nova Scotia, 8University of Victoria*

Background and Objectives: Throughout the COVID-19 pandemic, primary care nurses (PCN) were redeployed to areas outside of primary care to mitigate staffing shortages. There is a scarcity of literature describing their perceptions of, and experiences with, redeployment during the pandemic.
The project aims to: a) describe PCN perspectives and experiences regarding redeployment; b) discuss the opportunities and challenges presented by redeployment; and c) explain the nature (e.g., settings, activities) of PCN redeployment during the COVID-19 pandemic.

Approach: In this qualitative study, we conducted semi-structured interviews with primary care nurses (i.e., Nurse Practitioners (NP), Registered Nurses (RN), and Licensed/ Registered Practical Nurses (L/RPN)) regarding their roles and experiences during the COVID-19 pandemic. Participants were recruited from four regions in Canada including: the Interior, Island, and Vancouver Coastal Health regions in British Columbia; Ontario Health West region in Ontario; the province of Nova Scotia; and the province of Newfoundland and Labrador. A cross-provincial coding template developed with researchers from all sites was used to code the interviews. Data related to redeployment were analyzed thematically.

Results: A total of 76 PCNs across four study regions (24 NPs; 37 RNs; 15 LPNs/RPNs) were interviewed. The sample consisted of 94.7% women, and represented different geographical areas, and experiences with redeployment during the pandemic. Thirty-five participants reported experiencing redeployment during the pandemic. Three overarching themes related to redeployment during the COVID-19 pandemic were identified: (1) call to redeployment, (2) redeployment as an opportunity/challenge, and (3) scope of practice during redeployment. Primary care nurses across all regulatory designations reported variation in the process of redeployment within their jurisdiction (e.g., communication, policies/legislation), different opportunities and challenges that resulted from redeployment (e.g., scheduling flexibility, workload implications), and scope of practice implications (e.g., push limits of scope). The majority of nurses discussed redeployment being voluntary rather than mandated.

Conclusion: Redeployment is a useful workforce strategy during public health emergencies; however, it requires a structured process and decision-making approach that explicitly involves healthcare providers affected by redeployment. Primary care nurses should only be redeployed if explicit arrangements have been made for the care of patients in their original practice area.

Co-developing an Inclusive and Integrated Health Workforce Minimum Data Standard for Enhanced Planning and Decision-making in Canada

Presented by: Katherine Zagrodney

All Authors: *Neeru Gupta1, 2, Kathleen Leslie1, 3, Christine Guptill4, Dax Bourcier1, 5, Brenda Gamble1, 6, Sophia Myles1, 7, Katherine Zagrodney1, 8, 9, Brenna Bath10, Angela Mashford-Pringle11, Arthur Sweetman1, 12, Natalie Crown1, 13, Ivy Bourgeault1, 7, Sarah Simk*
Author Affiliations: *1Canadian Health Workforce Network (CHWN), 2University of New Brunswick, 3Athabasca University, 4School of Rehabilitation Sciences, University of Ottawa, 5IWK Health Centre, Dalhousie University, 6Ontario Tech University, 7University of Ottawa, 8VHA Home HealthCare, 9University of Toronto, 10School of Rehabilitation Science, University of Saskatchewan, 11Dalla Lana School of Public Health, University of Toronto, 12McMaster University, 13Leslie Dan Faculty of Pharmacy, University of Toronto*

Background and Objectives: Advancing evidence-based health workforce planning in Canada depends on improving availability and uptake of fit-for-purpose data from multiple sources. While different minimum data standards (MDSs) for health workforces exist, these tend to be limited in their capability to support integrated planning, capacity building, and equity, diversity and inclusion (EDI) initiatives. This presentation describes a three-phase process undertaken to co-develop a fit-for-purpose inclusive MDS in partnership with key health workforce healthcare partners across Canada.

Approach: Three phases included 1) inclusion/exclusion criteria were defined and applied to synthesized data elements grouped into categories (modules) across existing national and international MDSs and a health workforce literature scan to generate a draft Canadian MDS. 2) a series of virtual, participatory dialogues with professional association, regulatory and other healthcare workforce partners, researchers and government and agency officials highlighted additional data elements and modules for consideration; this facilitated priority setting and early buy-in. 3) the MDS modules and data elements were further condensed by applying a strict set of criteria working back from planning requirements.

Results: The inclusive MDS curated through this three-phase process includes existing data elements across a variety of open access sources (e.g., international MDS and existing surveys) and newly created data elements from experts and consultations through an explicit data-driven planning orientation. Data elements that acknowledge multi-occupational and multi-jurisdictional differences in employment and practice are divided into three key modules: 1) identification and demographics, including new EDI indicators (n = 13); 2) education and training required for licensure and enhanced skills applicable across a range of occupations (n = 9); 3) service capacity by employment modality and type are captured through a matrix approach (n = 14). Standardized information for each data element includes a definition, rationale, prompt and response options, and other data collection details.

Conclusion: Data standardization enabled through this MDS is foundational for integrated planning and addressing EDI considerations for optimal allocation to meet care needs. Elements of the MDS and lessons learned from this three-phase development process are transferable. Next steps include refining the MDS with partners before publishing a freely accessible version.

Supportive Spaces in Caring Places: Identifying Gaps in Support for Staff Grief and Bereavement in the Design of Long-Term Care Homes - A Scoping Review

Presented by: Amelia Ariana Zaiane

All Authors: *Amelia Ariana Zaiane1, Chantal Trudel1*
Author Affiliations: *1Carleton University*

Background and Objectives: Confronting dying, death, and grief is part of everyday in Long-Term Care (LTC). Significant gaps exist in system supports for grief and bereavement for everyone, but it is particularly overlooked for staff, contributing to high burnout and turnover rates. While research on the physical environment in LTC homes has focused on resident outcomes, design interventions supporting staff can lead to better resident care and lower burnout rates when staff are well-supported in their grief.

Approach: We employed a qualitative scoping review process of academic articles published in the areas of grief and bereavement, in relation to staff supports, and design of the physical environment of homes, within the context of LTC from the early 2000s to the present, mainly in Canada and America. This review is written as a precursor to an environmental scan we are conducting to catalogue ideas, cues and lessons from other high-mortality healthcare settings that have attempted to address staff grief and bereavement through the design of a supportive physical work environment to support future co-creating ideas with LTC homes.

Results: Staff grief and bereavement supports in LTC appear to predominantly consist of peer-led social supports, and reliance on hospice and spiritual care staff to supplement support. Despite this, grieving staff members may be expected to reach out for help instead of support being offered, an unhelpful barrier that can impact resident care, as evidenced through various studies. The physical environment can also strengthen staff social support. Studies show connections between the design of LTC environments that support social interaction between residents, improved staff morale and satisfaction, and potential to encourage staff social support for grief and bereavement. An environmental scan of comparative high-mortality settings shows the benefit that changes to the physical environment, such as quiet rooms, can offer staff experiencing grief in the workplace.

Conclusion: There appears to be little attention on the potential of the physical environment to support LTC staff grieve the death of a resident. This study is the first stage in the co-creation of LTC environments to better support staff grief and bereavement experiences in Long-Term Care.

The impact of the proposed price guidelines on Canadian patented drug prices

Presented by: Wei Zhang

All Authors: *Aslam Anis1, Daphne Guh2, Aidan Hollis3, Wei Zhang1, Paul Grootendorst4*
Author Affiliations: *1University of British Columbia, 2Centre for Advancing Health Outcomes, 3University of Calgary, 4University of Toronto*

Background and Objectives: Canada's Patented Medicine Prices Review Board (PMPRB) regulates patented drug list prices. On July 1, 2022, the PMPRB changed its external reference countries from "PMPRB7" to "PMPRB11" by removing Switzerland and the United States with relatively higher prices, and including six countries with relativity lower prices, which was expected to reduce the median international price (MIP) of drugs and price ceilings. Our study objective was to assess the impact on Canadian patented drug list prices.

Approach: Using IQVIA MIDAS® quarterly sales data, we selected innovative branded products that were launched (i.e., a first sale) in Canada in 2013-2018. We assumed that the change in reference countries came into force in 2013, and the internal reference pricing (IRP) approach currently used by the PMPRB would be (scenario 1) or would not be used (scenario 2). The list price for each product in each country was calculated as its average annual price during the 3rd year after its Canadian launch. The MIP was determined by the median of the list prices of PMPRB7 (MIP7) and PMPRB11 (MIP11).

Results: Among 400 innovative branded products in 2013-2018, 321 products (80.3%) were launched in at least one country in PMRPB7 and PMPRB11 and had both MIP7 and MIP11, 11.0% had MIP7 but not MIP11, 1.5% had MIP11 but not MIP7, and 7.3% had neither. Based on the current list prices under the PMPRB Guidelines using PMPRB7, the total current expenditures were $7,134.4M. If both IRP and external reference pricing were used (scenario 1), MIP11 would not be binding for most products because their current list prices were already lower than MIP11, or greater than both MIP7 and MIP11 (price ceilings were determined by IRP instead of MIP). Total expenditures would decline only by 0.7%. If IRP were abolished (scenario 2), total expenditures would decline by 14.1%.

Conclusion: Replacing MIP7 with MIP11 could have little impact as MIP11 would not be binding for most medicines. The impact depends on whether to retain IRP and how to price medicines without MIP11. While the new Guidelines are under consultation, our findings suggested using MIP11 alone could result in lower spending.

Cost drivers during the COVID-19 pandemic: the key pressures for Canada's public and private drug plans in 2019-2022

Presented by: Yvonne Zhang

All Authors*: Yvonne Zhang 1*
Author Affiliations: *1Mrs*

Background and Objectives:
Canadian public drug plans and private insurers together account for over three-quarters of all prescribed drug spending in Canada. This presentation sheds light on the differences and similarities between key cost pressures for public and private drug plans, differentiating between short-term effects and those with longer-lasting impacts. With a focus on data from March 2020 onward, the study highlights the impact of the COVID-19 pandemic on Canadian drug spending.

Approach: Using public plan data from the NPDUIS Database at the Canadian Institute for Health Information (CIHI) and private plan data from the IQVIA Private Pay Direct Drug Plan Database, a sophisticated cost driver model isolates the key factors contributing to the growth in drug expenditures: demographic, volume, price, substitution (generic and biosimilar), and drug-mix. The study spans from 2019, before the pandemic, to 2022, with a retrospective look at recent trends and integrating age and gender considerations.

Results: Increased use of higher-cost medicines is the primary driver of drug cost growth, pushing costs up by 5%-8% annually. Medicines with annual costs exceeding $10,000 and $25,000 now represent 1/3 and 1/5, respectively, of total drug costs in both public and private drug plans.
Cost-mitigating measures, including pronounced savings from generic and biosimilar substitution—boosted by biosimilar switching initiatives, combined with minor price reductions—were not enough to counterbalance the increasing drug-mix effect.
The COVID-19 pandemic caused shifts in claims for drug plans, from a downward demographic effect due to fewer reimbursed beneficiaries in 2020 to a rebound surpassing pre-pandemic levels in 2021 and 2022. Meanwhile, the volume effect, partly tied to pandemic-related temporary prescription size limits, exerted a minor inverse force.

Conclusion: A greater understanding of the forces driving expenditures in Canadian drug plans will enable policymakers and stakeholders to better anticipate, manage, and respond to evolving cost pressures in public and private drug plans, and to inform discussions on long-term system sustainability.

Factors associated with elective surgery wait times during the COVID-19 pandemic in care pathways involving inter-establishment transfers.

Presented by: Ya Ning Zhao

All Authors: *Isabelle Gaboury1, Isabelle Turgeon2, Stefan Parent2, Thomas Poder3, Argerie Tsimicalis4, Janet Rennick5, Aurélie Vigné6, Soraya Barchi2, Martin Sasseville1, Marie Beauséjour1, Nathalie Jourdain2, Sofia Addab4, Christine Gannon5, Ya Ning Zhao1*
Author Affiliations: *1Université de Sherbrooke, 2CHU Sainte-Justine, 3Université de Montréal, 4Shriners Hospitals for Children - Canada, 5Montreal Children Hospital, 6Initiative MUSCO*

Background and Objectives: The care pathways of patients requiring complex surgical care for musculoskeletal conditions may be particularly affected by the fragmentation of care resulting from the occurrence of inter-establishment transfers. In addition, hundreds of elective surgeries were postponed or cancelled during the initial waves of the SARS-CoV-2 pandemic. We sought to identify the changes in surgical wait times between the pre- and peri-pandemic periods, and to identify factors associated with surgical delays in complex inter-establishment care pathways.

Approach: A retrospective analysis of pediatric cases undergoing elective orthopedic procedures in the three pediatric hospitals in Montréal was conducted. Spine surgeries and limb surgeries in patients with motor impairment were selected as patient profiles for inclusion, as they typically receive care through pathways involving more than one establishment (presurgical follow-up, surgery, postoperative rehabilitation). Surgical delays were calculated as the time patient was first referred to surgery to the actual surgery date. We compared the surgical delays between two periods (Sept.2019-Feb.2020 vs Sept.2020-Feb.2021) using Mann-Whitney tests, and identified the factors associated with the delays using multivariable Cox regression models.

Results: Ninety-four (94) patients were included (n=47 in each time period). Wait times for surgery were longer in the peri-pandemic period 2020-2021 compared to the pre-pandemic period of 2019-2020, with respective medians of 149 [IQR=283] days and 120 [IQR=218] days; $p = 0.002$. Factors associated with delays included a primary diagnosis of scoliosis ($p = 0.032$) and of upper limb surgical conditions ($p = 0.021$), the associated conditions of dysplasia ($p = 0.028$), neuromuscular diseases (0.001) and lower limb deformities (0.003), as well as the need for a postoperative transfer ($p = 0.002$).

Conclusion: The pandemic exacerbated the fragmentation of care in patients undergoing inter-establishment transfers. Clinically-related (primary diagnosis, associated conditions) and care provision (postoperative transfer) factors were significantly associated with surgical wait times. The consequences on patient's health and quality of life of lack of timely access to surgery should be further explored.