1 - A Difference-in-Differences Analysis of Changes in Youth Cannabis Use After an Increase in Cannabis Minimum Legal Age in Quebec, Canada

Presenter: Hai Nguyen

THEME: Health Policy, Healthcare Reform (includes priority setting, politics)

BACKGROUND AND OBJECTIVES

Concerned by potential harms of cannabis use on youths' development and mental health, Quebec recently raised the MLA for cannabis from 18 to 21. Quebec's policy change has generated substantial debate. Proponents believe that the higher MLA will protect youths from the harms of cannabis use while critics argue that it will push them to the illegal market and thus, undermine the goals of cannabis legalization. This study provides the first evidence to inform this debate by examining the effect of Quebec's MLA increase policy on cannabis use among youths.

APPROACH

We used data from the National Cannabis Survey 2018-2020 and quasi-experimental difference-in-differences method to compare changes in past 3-month cannabis use in Quebec vs. changes in other provinces that did not increase the MLA. We estimated the policy's effects for youths aged 15-20 and separately, for age groups 15-17 and 18-20.

RESULTS

We found that Quebec's increased MLA reduced the propensity of cannabis use among youths aged 18-20 by 16.4 percentage points (p=0.01). This reduction was driven by a decline in past 3-month cannabis initiation (12.7 percentage points, p=0.02). Meanwhile, the higher MLA had no significant effect on the 15-17 age group. Our results were robust to several checks including accounting for possible effects of COVID-19 on cannabis use.

CONCLUSION

The increase in MLA for cannabis in Quebec was effective at reducing cannabis use among 18-20 year olds while having no impact on those aged 15-17. These findings help alleviate the concerns that youths can switch to the illegal market in response to a higher MLA.

2 - A framework to support the progressive implementation of integrated team-based care for the management of COPD: A collective case study

Presenter: Madelyn Da Silva

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

In Canada, there is consensus about the need for integrated, team-based care in primary care settings to help manage chronic conditions such as chronic obstructive pulmonary disease (COPD). However, less is known on how to support the spread of successful models; there is limited empirical evidence to support this process in chronic disease management. We studied the supporting and mitigating factors required to successfully implement and spread a model for COPD management in primary care.

APPROACH

We conducted a collective case study using multiple methods of data collection including interviews, living documents, and a focus group. Our study explored a team-based model of care for COPD known as Best Care COPD (BCC) that has been implemented in primary care settings across Southwestern Ontario. BCC is a quality improvement initiative that was developed to enhance the quality of care for patients with COPD. Participants in our research included healthcare providers involved in the delivery of the BCC program.

RESULTS

We identified mechanisms influencing the spread of BCC and categorized them as Foundational (evidence-based program, readiness to implement, peer-led implementation team), Transformative (adaptive process, empowerment and collaboration, embedded evaluation), and Enabling Mechanisms (provider training, administrative support, role clarity, patient outcomes). We developed a framework to inform the progressive implementation of integrated, team-based care for chronic disease management. Our framework builds off our empirical work and is framed by local contextual factors.

CONCLUSION

This study explores the implementation and spread of integrated team-based care in a primary care setting. Despite using COPD as an exemplar, we believe the findings can be applied in other chronic disease contexts. We provide a framework to support progressive implementation of integrated team-based care for chronic diseases.

3 - A Mixed Methods Evaluation of a Remote Care Management Program to Provide Chronic Disease Management and COVID-19 Care in Burlington and Surrounding Areas

Presenter: Chi-Ling Sinn

THEME: Collaborative Healthcare Improvement Partnerships

BACKGROUND AND OBJECTIVES

The Community Remote Care Management (RCM) program connects individuals with an interdisciplinary team using remote monitoring technology. Patients may bring their own or borrow devices to measure their vitals and communicate with the care team. Patients also complete a health screener, which may prompt referral to the Community Connector. The RCM program was designed by primary care, community paramedicine, home and community services, acute care, and patient partners and launched in November 2020.

APPROACH

Two embedded researchers are evaluating the RCM program one year after implementation. The evaluation will examine patient and caregiver experiences, provider experiences, and self-management and system navigation outcomes. We will use program data to examine program enrollment, assessment, care planning, escalation workflows, and community connections. We will summarise results from patient and provider experience surveys and conduct interviews with program participants. Additionally, operational documents will be reviewed and summarised to provide a detailed description of the program.

RESULTS

An earlier review of assessment data revealed that patients with chronic disease were screened to have significant needs in depressed mood/loneliness, recent high acute care use, and additional comorbidities. Patients were most often connected with a pharmacist, respiratory therapist, or system navigator. We anticipate that patients and caregivers will gain insight about their health condition and signs and symptoms, report more timely access to advice and support, and ultimately, be more confident in their ability to self-manage beyond the program. We also anticipate that the ability to share information on the same platform will improve providers' ability to work with patients, caregivers, and other providers.

CONCLUSION

We anticipate that the RCM program will demonstrate positive changes to the quintuple aim and achieved through a strong community focus, integrating health and social services, and simplifying communication among patients, caregivers, and providers.

4 - A new taxonomy was developed for overlap across ‘Overviews of systematic reviews’: a meta-research study of research waste

Presenter: Carole Lunny

THEME: Knowledge Translation & Exchange (includes KTE methods)

BACKGROUND AND OBJECTIVES

Multiple ‘overviews of reviews’ conducted on the same topic (“overlapping overviews”) represent a waste of research resources and can confuse clinicians making decisions amongst competing treatments. We aimed to assess the frequency and characteristics of overlapping overviews.

APPROACH

MEDLINE, Epistemonikos and Cochrane Database of Systematic Reviews were searched for overviews that: synthesised reviews of health interventions and conducted systematic searches. Overlap was defined as: duplication of PICO eligibility criteria, and not reported as an update nor a replication. We categorised overview topics according to 22 WHO ICD-10 medical classifications, overviews as broad or narrow in scope, and overlap as identical, nearly identical, partial, or subsumed. Subsummation was defined as when broad overviews subsumed the populations, interventions and at least one outcome of another overview.

RESULTS

Of 541 overviews included, 169 (31%) overlapped across similar PICO, fell within 13 WHO ICD-10 medical classifications, and 62 topics. 148/169 (88%) overlapping overviews were broad in scope. Fifteen overviews were classified as having nearly identical overlap (9%); 123 partial overlap (73%), and 31 subsumed (18%) others.

CONCLUSION

One third of overviews overlapped and a majority covered broad topic areas. A multiplicity of overviews on the same topic adds to research waste across medical disciplines. Authors of overviews can use this study and the sample of overviews to identify topics that do not need to be duplicated

5 - A Novel, Hybrid Intensive Ambulatory Care Program for Eating Disorders in Adolescents: Protocol for a Naturalistic Feasibility, Acceptability, and Preliminary Effectiveness Trial

Presenter: Kaylee Novack

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

The incidence of eating disorders (EDs) among adolescents has increased significantly since the beginning of the COVID-19 pandemic. Virtual care is a promising treatment modality for adolescents with EDs but remains understudied in this population. We aim to implement a novel, hybrid (virtual and in-person) day hospital program for youth and evaluate its feasibility, acceptability, and preliminary effectiveness.

APPROACH

We will use a naturalistic pretest-posttest design to evaluate our proposed pilot intensive ambulatory care program (IACP). This novel type of day hospital care follows evidence-based principles and uses a family-centered, educational, and motivational approach. It will be tailored to the psychological needs of each participant and delivered in a hybrid format. One hundred participants meeting DSM-5 criteria for EDs, aged 12-18 years, will be recruited over the 2-year trial period. We will examine (1) recruitment, retention, and adhesion to protocol rates, (2) participant and family satisfaction, and (3) preliminary effectiveness using quantitative self-report questionnaires.

RESULTS

We expect to recruit approximately 80% of eligible participants, to retain at least 75% of eligible participants, and to have at least 70% of participants complete at least one therapeutic session per week and all pre- and post-intervention questionnaires. We base our estimates on previous literature and consider that the highly flexible design of the IACP, with no additional work required from participants to participate in the study will lead to high levels of feasibility. We anticipate that participants and their families will be satisfied both with the program and with the hybrid delivery format. We expect that participation in the IACP will be associated with a medium effect size reduction in eating disorder psychopathology, from baseline to end-of-treatment.

CONCLUSION

Given the high clinical burden associated with EDs, this project, has the potential to fill an important research gap, by testing the implementation of a novel hybrid mode of intervention. If proven feasible, acceptable, and effective, the IACP could lead to important improvements in healthcare services for adolescents with EDs.

6 - A Prospective Cohort of Substance Users in British Columbia: Preliminary Results of the Outcomes for Patients Accessing Addiction Care (The OPAC study)

Presenter: Hannah James

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Hospitals are an important setting to engage individuals with a substance use disorder (SUD) in evidence-based treatment. Understanding hospital-based addiction care among individuals with a SUD is largely unknown. This study aims to describe the sociodemographic, substance use, mental health, and service access characteristics of individuals in receipt of specialized addiction care in an urban, tertiary hospital setting.

APPROACH

This study is a longitudinal cohort of individuals accessing specialized addiction care at an urban tertiary care centre in Vancouver, BC. Participant recruitment occurred between January 2018 and March 2020 and included individuals with a SUD who accessed hospital-based addiction care. A one-time interviewer-administered questionnaire was administered to solicit sociodemographic data, patterns of substance use, anxiety and depression (as assessed by a validated tool), and previous hospital and addiction treatment experiences. Participants additionally consented to annual linkage to health administrative databases over a five-year period to determine health and treatment outcomes after hospital discharge.

RESULTS

Between January 2018 and March 2020, 539 participants were recruited from either an inpatient or hospital-based outpatient setting. The mean age of participants was 42 years, 63% identified as being male gender, 63% reported identifying as White while 29% reported identifying as Indigenous. Patterns of high-frequency substance use in the preceding 6 months included: nicotine (85%), illicit prescription opioid, opioid, or stimulant use (28%, 59%, and 51% respectively), or marijuana use (41%). Approximately 82% of participants had ever injected drugs. Lifetime and past-six-month overdose events occurred among 71% and 40% of participants respectively. Depression and anxiety were common, being identified in 71% and 57% of participants respectively. Regarding mental health treatment, lifetime access was reported by 60% with 32% reporting past-six-month treatment.

CONCLUSION

Preliminary results demonstrate that most participants were older, male, identified as being White, were smokers, and used illicit opioids, with nearly as many using stimulants. This unique description of a cohort of participants is important for designing health service interventions and structuring policies for people accessing hospital-based addiction care.

7 - A qualitative exploration of youth, family, and provider perspectives on supports needed for access to and transitions through youth mental health and addictions care

Presenter: Roula Markoulakis

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Transitional-aged youth (TAY) are at a vulnerable stage of their development in which mental health and/or addiction (MHA) issues tend to manifest and/or increase in severity. These youth also tend to find themselves caught in the gap between child and adult MHA services, often resulting in sub-optimal access to and transition through MHA services. Navigation services may be one way to close this and other system gaps and improve service utilization and supports for TAY.

APPROACH

This is a descriptive qualitative study of TAY, family, and provider perspectives on their experiences with accessing/providing MHA care and transition supports for TAY. Focus groups and semi-structured interviews were conducted with 63 participants with varying levels of familiarity with navigation. Participants were asked about their experiences with navigating the MHA system, their perceptions of the barriers and facilitators to accessing care for TAY with MHA concerns, and their views on the role of navigation services in supporting access to and transitions in care. Data was analyzed utilizing a thematic analysis approach.

RESULTS

Focus groups and interviews were conducted with 14 TAY, 26 family members, and 23 service providers. Seven themes emerged during the data analysis phase: pathways to care; appropriate and comprehensive care; continuity of care; informed care; family involvement; TAY involvement; and finally, navigation supporting TAY and family care, which encompassed all aforementioned themes. These results provide a better understanding of the needs of TAY and their families in relation to accessing and transitioning through MHA system supports and improving MHA outcomes. They also include the views of service providers on the current state of access to and transitions through MHA care, including perceived barriers and/or facilitators to quality MHA care, specifically for the TAY population.

CONCLUSION

This information is useful in examining how navigation services can be meaningful in mitigating the challenges faced by TAY and their families when seeking help for MHA issues. It is also valuable in exploring how navigation services can support MHA system transformation for enhanced access to care.

8 - A scoping review of mental health and/or addiction care needs, barriers, and facilitators for transitional-aged youth and their families

Presenter: Hinaya Cader

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Transitional-aged youth (TAY) with mental health and/or addictions (MHA) concerns and their families experience significant challenges finding, accessing, and transitioning through needed MHA care. In order to develop appropriate supports that assist TAY and their families in navigating MHA care, their experiences in the MHA care system must be better understood. This scoping review identified and explored the roles of, and barriers and facilitators for, TAY and their families when seeking MHA care.

APPROACH

This scoping review commenced with a search in five relevant databases using Arksey and O'Malley's framework. Three research team members were involved in title, abstract, and full-text scanning and data extraction. Studies focusing on TAY anywhere between the ages of 12-29 and meeting the study objectives were included. Extractions compiled background and narrative information pertaining to the nature and extent of the data. Analysis and synthesis of findings involved numerical description of the general information extracted (e.g., numbers of studies by country) and thematic analysis of narrative information extracted (e.g., family involvement in TAY help-seeking).

RESULTS

A total of 5894 articles were identified. Following title and abstract scanning, 1037 articles remained for full-text review. A total of 66 articles were entered into the extraction stage. Findings to be presented include background information about extracted articles, in addition to five themes that emerged pertaining to barriers and facilitators to access and transitions through care and the needs and roles of families in supporting help-seeking and care transitions: holistic supports; proactive preparation; empowering TAY & families in transitions; collaborative relationships; and systemic considerations. Six consultations were conducted with experts in the field to discuss findings, verify themes, and inquire about additional literature. This review provides essential contextual information regarding TAY with MHA concerns and their families' needs when seeking care.

CONCLUSION

Identifying the factors that influence transitions for TAY with MHA concerns with a family lens lends to an enhanced understanding of the ways in which MHA programs can support this population's needs, involve family members as appropriate, reduce the barriers experienced, and work to build upon existing facilitators.

9 - Acceptability of Automatic Referrals to Supportive and Palliative Care by Patients Living with Advanced Lung Cancer: A Co-Design Process

Presenter: Aynharan Sinnarajah

THEME: Cancer

BACKGROUND AND OBJECTIVES

People with advanced lung cancer experience high symptom burden and emotional distress. However, timely access to supportive and palliative care (PC) remains a challenge. A proposed solution is to trigger an automatic referral process to PC by pre-determined clinical criteria. Patient acceptability of automatic referrals is unknown.
This study sought to co-design with patients and providers the operational processes and communication pieces for automatic PC referral for patients newly diagnosed with stage IV lung cancer.

APPROACH

Nine one-on-one interviews were conducted with advanced lung cancer patients on their perspectives on the acceptability of phone contact by a specialist PC provider triggered by an automatic referral process. Patient advisors, healthcare providers (oncologists, nurses from oncology and PC, clinical social worker, psychologist), and researchers were invited to join a co-design working group to develop and provide input on the operational and communication processes needed for the automatic referral process. Using the findings from patient interviews, the group developed the automatic referral process and met biweekly (virtually) over the course of 5 months.

RESULTS

Patients perceived being phoned directly by a PC provider offering a consult to be acceptable and beneficial for patients with advanced lung cancer. Patients emphasized the need for timely support, access to peer and community resources. They also addressed necessary components such as the naming of the service, timing of the referral, and information needed from the phone call. Using these findings, the co-design working group identified the eligibility criteria for identifying newly diagnosed stage IV lung cancer patients using the cancer centre electronic health record, co-developed a telephone script for specialist PC providers, a patient handout about supportive care, and handout on supportive care resources. Additionally, interview and survey guides for evaluating the implemented automatic process were refined.

CONCLUSION

A co-design process ensures stakeholders are involved in program development and implementation from the very beginning, to make outputs relevant and acceptable for stage IV lung cancer patients. The next phase of this work will evaluate acceptability of an automatic referral process from perspectives of patients called and healthcare providers.

10 - Access to and utilization of healthcare for people with osteoarthritis: a spatial analysis approach

Presenter: Xiaoxiao Liu

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Achieving equitable access to care is a priority in Canada, especially for patients in rural and remote areas. Examining rural-urban differences in access to care and utilization of health services is critical to provide a comprehensive picture of gaps in access to needed care.

APPROACH

Using Alberta administrative health data, we identified patients with OA and associated health records. We calculated travel time from patient to physician's postal code using validated road network. We summarized rural-urban differences in travel time to primary care physicians(PCP), orthopedic surgeons(Ortho), and physiotherapists(PT) along the Rural-Urban continuum. We explored geospatial patterns using hotspot analysis and distance decay effect of healthcare utilization. We applied multivariate linear regression and geographically weighted regression (GWR) to investigate rural-urban differences in associations of area-level factors to non-local PCP utilization in local geographic area (LGA), which was defined as the PCP utilization outside patients' home LGA.

RESULTS

Median travel time in Alberta was 11.6 minutes(IQR=4.3–25.7) to PCP, 28.9(IQR=14.8–65.0) to Ortho, and 33.7(IQR=23.1–47.3) to PT. We observed rural-urban differences in travel time to providers (PCP rural-remote (2.9, IQR=0.0–92.1) vs. metro(12.6, IQR=6.4–21.0); Ortho rural-remote (233.3, IQR=171.3–363.7) vs. metro (21.3, IQR=14.0–29.3); PT rural-remote (62.4, IQR=0.0–232.1) vs. metro (32.1, IQR=25.2–39.9)). Both GWR and multivariate linear regression identified two factors (median travel time to PCP and percentage of low-income families within LGAs) that were significantly associated with non-local PCP utilization. GWR model only showed non-local PCP had significantly negative association with discontinuity of care index (percentage of patients not having PCP visit) in southwest Alberta, while positive association with population percentage with a university degree in northern Alberta

CONCLUSION

These findings may inform accessibility evaluation, health resources allocation, and reduction of inequity in access to care. This research can contribute as a part of evidence for the development, design, and implementation of local and/or provincial initiatives that aim to reduce rural-urban disparities in utilization and access to OA care

11 - Access to Mental Health and Substance Use Services for Youth and Caregivers during the COVID-19 Pandemic: A Cross-Sectional Survey

Presenter: Maida Khalid

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

The COVID-19 pandemic continues to significantly impact Canadians' mental health and/or addictions (MHA) concerns and exacerbate barriers to service access. Recent research shows, pandemic-related psychological distress (anxiety and depression) continues to affect Canadians' ability to function with 59% of Canadians expressing a need for relevant and effective MHA services. This study will explore the association of access to services with factors that may influence service-seeking and access among Ontario youth and caregivers during the pandemic.

APPROACH

A cross-sectional survey of 5000 participants 18 years or older, representative of the population of Ontario based on age, gender and location was conducted utilizing Delvinia's AskingCanadians panel from January – February 2022. The ASSIST and DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure–Adult were used to assess the presence of substance and mental health concerns. Participants were also asked which MHA services they were seeking and/or accessing prior to and during the pandemic. Predictors of service access (i.e. sociodemographics, mental illness and/or addiction, and social supports) before and during the COVID-19 pandemic will be assessed.

RESULTS

Through a logistic regression, we anticipate our results will describe the significance of various sociodemographic, MHA, and social support predictors' effects on the likelihood of MHA service seeking and service access. We will also descriptively present the ratio of youth/caregivers that were in need of but were/were not accessing care during the pandemic, self-reported satisfaction with services accessed, and a hierarchy of the kinds of assistance preferred by respondents to support seeking and accessing services in the MHA system.

These analyses will be completed by March 2022, and will articulate existing gaps in MHA services to improve MHA service engagement, especially for those that have experienced considerable MHA impacts during the COVID-19 pandemic.

CONCLUSION

Identifying the factors influencing MHA service seeking and access, especially during global health emergencies, can provide crucial information for targeted MHA service planning and response, in order to meet the needs of service users and ease the MHA system navigation burden on vulnerable populations.

12 - Adult Experiences with Hospitalization in Alberta during the COVID-19 Pandemic

Presenter: Kyle Kemp

THEME: COVID-19

BACKGROUND AND OBJECTIVES

Little is known about the experiences of those hospitalized during the COVID-19 pandemic in Canadian hospitals. Our aims were to a) report on the experiences, b) compare with historical results, and c) assess for potential monthly differences of patients hospitalized in the early months of the COVID-19 across Alberta.

APPROACH

A random sample of adults were surveyed within six weeks of discharge from 93 hospitals, using a modified version of the Canadian Inpatient Experiences Survey – Inpatient Care. Discharges from April to September 2020 comprised the "during COVID-19 pandemic" cohort, while April to September 2019 formed the historical one. Results were reported as percent in "top box", indicative of the most positive answer choice. Odds of reporting a "top box" response were calculated, while controlling for demographic and clinical features.

RESULTS

In total, 23,412 surveys (11,344 during COVID-19, 12,068 historical) were obtained. Those hospitalized during COVID-19 had higher odds of "top box" ratings on 17 of 39 questions examined, and lower odds on two questions (information about the admission process, inclusion of family/friends in care decisions). The remaining 20 questions showed no difference between the two cohorts.

CONCLUSION

Our results indicate that respondents hospitalized during the early months of the pandemic had experiences that were largely better or comparable to pre-pandemic. This speaks to the dedication and resilience of staff who provided care during challenging circumstances. Our findings may assist in mitigating fears among those who are hesitant to seek medical care during future pandemics or public health emergencies, including subsequent waves of COVID-19.

13 - An international comparison and typology of opioid use disorder treatments

Presenter: Kellia Chiu

THEME: Pharmaceutical Policy

BACKGROUND AND OBJECTIVES

Opioid agonist therapy (OAT) is an effective evidence-based treatment for opioid addiction and has been implemented in many countries as part of national drug strategies. Countries may have similar broad drug policy goals of prevention, treatment, and harm reduction; however, policy design and implementation may differ based on contextual factors. We aimed to compare opioid addiction treatment models involving OAT across different countries, by describing program features and building a typology of treatment approaches.

APPROACH

We conducted a policy content analysis on 12 countries, using documentary data.

For each country, we collected documents that provided information on health systems, drug use and substance use disorder epidemiology, national drug strategies, and national and subnational (where relevant) treatment guidelines and programs.

We used the Health System Dynamics Framework to guide our data extraction fields: health system structure and role of primary care; drug policy approaches; opioid addiction epidemiology; OAT regulation, funding, and delivery; and key OAT program features.

To enable international comparison, we developed an exploratory typology to classify these programs on both the macro- and micro-levels.

RESULTS

We found existing typologies in the drug policy literature focus on describing macro-level policy approaches and have a legal/regulatory framing, rather than a micro-level approach, focused on clinical/healthcare outcomes. However, a framework solely classifying features at a micro-level based on clinical practices and implementation may not account for contextual factors that influence the existence and impact of OAT programs. We anticipate our typology of treatment models would classify them against two dimensions: 1) the policy context (sociocultural, political, geographical, health system, and epidemiological factors) and 2) policy design (i.e. program details).

We anticipate the OAT pharmacological agents used will be similar among countries. However, preferred OAT agents, treatment settings, primary care and specialist physicians' roles, and provider/OAT funding will likely differ.

CONCLUSION

Our novel typology for opioid addiction treatment programs may help explain the relationships between policy contexts, program features, and outcomes. Additionally, identifying combinations of macro- and micro-level conditions that may lead to certain outcomes and health improvements could inform policymaking, by facilitating policy learning between national or subnational jurisdictions.

14 - An investigation of the socioeconomic gradient of physical capability among older adults using the Canadian Longitudinal Study on Aging (CLSA)

Presenter: Christina Torrealba

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

As the Canadian population aging accelerates, it is important to assess and track the socioeconomic gradient of health among older adults. Physical performance measures, such as the chair rise test, correlate with future health outcomes and other health measures, and may provide additional measures of health status in studies of the socioeconomic gradient of health. We aim to assess whether the socioeconomic gradient of health exists in the chair rise test among older adults.

APPROACH

We use the first follow-up data from the Canadian Longitudinal Study on Aging (CSLA) Comprehensive, which includes over 27,000 participants aged 46-90, who completed both computer-assisted interviews and clinical/physical examinations, including physical performance tests. We use ordinary least squares regression models to assess associations between the chair rise test and socioeconomic status as measured by education and subjective wealth and income. This study also gains insight from older adults, caregivers, and relevant community members through stakeholder consultations focusing on the usefulness and meaning of chair rises from their perspectives.

RESULTS

This study is in progress. Based on the existing literature regarding physical performance measures of health in older adults, we expect the chair rise test will exhibit an independent, statistically significant socioeconomic gradient of health. We also expect there will be associations between the chair rise test and other measures of health (i.e., self-rated health). The socioeconomic gradient of the chair rise test is expected to be evident by middle-age and is hypothesized to be steeper among males than females, following findings of the relevant existing literature. Due to the importance of the chair rise motion for many activities of daily living, we anticipate that this measure will capture a more nuanced understanding of the socioeconomic gradient of health compared to other physical performance measures.

CONCLUSION

This study will show the potential use of the simple chair rise test for the assessment of health inequalities in the aging Canadian population. Findings of this study may encourage the incorporation of this measure in future population health surveys and in the routine clinical assessment of older adults.

15 - Analyzing documents to describe the COVID-19 crisis in long-term care in Ontario

Presenter: David Oldenburger

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

Long-term care has experienced significant issues for over two decades, including staff shortages, aging infrastructure, and residents with increasing complexity and needs. The COVID-19 pandemic saw these issues exacerbated into a national long-term care crisis. This study examined recent documents from the perspectives of different interest groups and organizations, to synthesize issues and recommendations for addressing the crisis in long-term care in Ontario.

APPROACH

Documents provide an understanding of the background and context of issues. Many documents have been written on the issues in long-term care which help understand how these existing issues were exacerbated into a crisis. This study conducted an analysis of public documents published between January 2020 and February 2021 on long-term care in Ontario. Thematic analysis of issues and recommendations in the documents was used to identify key themes. The themes help describe the crisis, providing a framework for policy reform.

RESULTS

Thirty-three documents published by twenty different groups were analyzed. Six key themes were identified from the issues and recommendations in the documents: a. Resident Care, b. Human Resources, c. Governance, Leadership and Management, d. Financing, e. Physical Infrastructure and Supplies and f. Training and Preparation. Groups and organizations who published these documents included academic institutions, government and public agencies, non-profit and professional organizations, and for-profit organization. There was congruence across many of the documents on some of the key themes. The six identified themes are not new issues in long-term care but like those expressed in documents and reports for over two decades.

CONCLUSION

Documents can shed light on how groups perceive certain issues. Many documents have been published since the pandemic describing the situation in long-term care. An analysis of these documents synthesized issues and recommendations into six key themes. These themes can be used for priority setting and policy reform.

16 - Anti-Black Racism in the Early Years: The Experiences of Black Families and Early Childhood Educators in Nova Scotia

Presenter: Emma Stirling Cameron

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

Anti-Black racism is a specific form of discrimination, stemming from a legacy of enslavement and segregation, that is targeted against people of African descent. Anti-Black racism is a social determinant of health that has had significant impacts on Black children and their families. Limited research has examined anti-Blackness during the early years—a period critical of development. This study sought to understand the manifestations of anti-Black racism in early childhood and explore its impact on families with Black children.

APPROACH

This qualitative research project used Critical Race Theory and thematic analysis. Early childhood educators (ECEs) who care for Black children and parents with Black children between the ages of 18 months and five years participated in virtual semi-structured interviews. Participants were recruited through social media, community organizations, and child care centres until theoretical saturation was reached. Interviews were recorded and transcribed verbatim. Several transcripts were coded collaboratively by the research team to establish a code book, after which remaining interviews were coded individually before regrouping to establish themes and sub-themes.

RESULTS

Both parents and ECEs described the ways in which anti-Blackness impacted the lives of Black children and their families. Parents described feeling like their children were constantly 'othered,' with White children and educators inappropriately touching children's hair and commenting on their skin. Black children were also described as victims of racial slurs, bullying, and over-punishment in majority-White child care settings. Parent's own experiences of segregation, otherness, and racial violence as children created feelings of concern and apprehension, knowing that their children are liable to experience similar traumas. Despite these challenges, parents and Black ECEs described the advocacy and decolonization work they were leading in their community and in their child's early learning spaces.

CONCLUSION

Results from this study suggest that families of Black children carry high levels of angst in early learning and that African Nova Scotian children are experiencing early racial violence and adverse childhood experiences. Findings may contribute to anti-racist policy development and a focus on more inclusive early childhood education for Black children and families.

17 - Approaches used to capture and improve patient experiences in hospital settings: A scoping review

Presenter: Michelle Marcinow

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Collecting and using patient experience data is a fundamental component of a learning health system. For health systems to deliver the best value for their users, it is critical that we capture what is important to patients, caregivers and families and use this information to inform initiatives aimed at improving care. This scoping review identified approaches reported in the literature that were used to capture and improve patient experiences in a hospital setting.

APPROACH

Articles included in this review required a description of an embedded strategy for capturing patient experience within a hospital setting that was used to inform quality improvement. Articles also had to be published in English between January 2004 and December 2020. Six databases (MEDLINE, EMBASE, PsycINFO, CINAHL, Health and Psychosocial Instruments and Cochrane Library) and grey literature (relevant hospital and government websites) were searched. Article screening was done by two reviewers who reconciled any disagreements through consensus. Data were extracted from eligible articles using a study-specific form in Microsoft Excel and synthesized using descriptive qualitative and quantitative approaches.

RESULTS

Thirty articles were included in this scoping review. Patient experience data were typically captured using standardized quantitative surveys, with few organizations supplementing survey data with qualitative data (e.g., patient complaints) for additional context. A wide range of quality improvement initiatives were implemented as a result of hospitals' low and/or declining patient experience/satisfaction scores. The process from collecting data to implementing and evaluating quality improvement initiatives was not well documented. Initiatives that were developed, implemented and monitored by a dedicated, multidisciplinary quality improvement team (nurses, administrators, physicians, etc.) generally saw improvements in patient experience and quality of care. The majority of working groups did not incorporate patients, caregivers, and families as members.

CONCLUSION

Current approaches to capture and improve patient experience in hospital settings vary, but should include a multidimensional approach led by a dedicated team. More work is needed to understand how to implement this type of approach for collecting actionable data that can be synthesized from various sources to inform quality improvement.

19 - Assessing ICD-11's potential for improved mental health reporting in Canada

Presenter: Janice MacNeil

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

CIHI reports on mental health using data from different sources coded with the International Statistical Classification of Disease, Tenth revision, Canada (ICD-10-CA) and the Diagnostic and Statistical Manual of Mental Disorders, 5th Revision (DSM-5). To ensure comparable pan- Canadian reporting, conversion algorithms between DSM-5 and ICD-10-CA are currently needed

CIHI is assessing the implications of implementing ICD-11 in Canada. This project contributes to that assessment by comparing the content of ICD-11's Chapter 06 on Mental, behavioural or neurodevelopmental disorders, with DSM-5.

APPROACH

A sample of DSM-5 clinical concepts were assessed for comparability in ICD-11. The DSM-5 concepts were mapped using DSM-5 concept titles to ICD-11 target codes and titles with the specificity of the match assigned an outcome type. These outcome types included exact (or conceptual) match, ICD-11 code less specific than DSM-5 concept, ICD-11 code more specific than DSM-5 concept, and no match found.

For cases where ICD-11 was less specific than DSM-5, we assessed whether combining multiple ICD-11 codes ("post coordination") could improve code matching. Reliability was optimized via dual mapping and validation of all concepts.

RESULTS

Of the 824 DSM-5 clinical concepts assessed, 77.1 % (n=635) were found to be an equivalent conceptual match with ICD-11 when mapped to a single or a combination of ICD-11 codes. Whereas 20.0% (n=165) of DSM-5 concepts were less specific in ICD-11 when mapped to a single or combination of ICD-11 codes, representing a loss of detail. Conversely, 2.2% (n=18) of DSM-5 concepts were more specific in ICD-11, resulting in greater specificity. For the remaining 0.7 % (n=6) of DSM-5 concepts, there were no match, meaning that the DSM-5 concept could not be found in ICD-11. These findings represent preliminary results with further analysis and validation required.

CONCLUSION

Better data can support improved mental health data capture for research, policy and decision-making in Canada. With the improved clinical content coverage of ICD-11, there will be potential opportunities for enhanced reporting of mental health data. Results of this project will contribute to the preparation for ICD-11 implementation in Canada.

20 - Association Between Primary Care Delivered Virtually and Emergency Department Use During the COVID-19 Pandemic in Ontario, Canada

Presenter: Nadine Chami

THEME: Primary Healthcare

BACKGROUND AND OBJECTIVES

Concerns have been raised about increased use of the emergency department (ED) because of reduced in-person care in Ontario, Canada due to the SARS-CoV-2 (COVID-19) pandemic. The aim of this study was to examine whether a shift from in-person to virtual visits by primary care physicians was associated with increased ED utilization among their enrolled patients.

APPROACH

We conducted a population-based cross-sectional study of virtual visits and ED utilization from April 1, 2020 to September 30, 2021 using administrative data from Ontario, Canada. Multivariable regression analysis was used to estimate the association between a physician's share of virtual visits and their enrolled patients' ED utilization.

RESULTS

In an unadjusted analysis, a 1% increase in the ratio of virtual visits by a physician was found to be associated with 11.4 fewer ED visits per 1,000 rostered patients. The results were significant even after controlling for month of year, Ontario census division, patient complexity, rurality, physician age and gender, and total number of visits per rostered patient, with 1.3 fewer ED visits per 1,000 rostered patients for every 1% increase in the share of virtual visits.

CONCLUSION

Counter to anecdotes and media reports, we did not find evidence of patients substituting ED visits because of less in-person care being available with their family physician. Future research should focus on examining the long-term impact of providing care virtually on access and quality of patient care.

21 - Barriers and facilitators to interprofessional collaborative practice when health workers provide care across settings

Presenter: Kathryn Asher

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Interprofessional collaborative practice is key to successful health care, including when health workers provide care across locations. While obstacles and enablers to such practices are discussed in the literature, there has yet to be a synthesis of these findings. This scoping review addresses this knowledge gap by identifying the barriers and facilitators to interprofessional collaborative practice at the macro, meso, and micro ecosystem levels when health workers collaborate across settings.

APPROACH

A scoping review of peer-reviewed literature was conducted across five databases: CINAHL, Embase, MEDLINE, PsycINFO, and SocINDEX. Studies available in English were included if they were a primary research study using qualitative methods or mixed methods with qualitative findings. First title and abstracts and then resulting full text articles were screened by two independent reviewers in Covidence™ with conflicts resolved by a third reviewer. Data was extracted in NVivo™ and synthesized using deductive and inductive analysis to uncover themes and subthemes.

RESULTS

Data was extracted from a total of 177 articles that met the inclusion criteria. We identified seven overarching themes reflecting barriers and facilitators across the macro, meso and micro levels of interprofessional collaborative practice: 1) policy; 2) governance; 3) finances and resources; 4) communication; 5) collaborative partnerships; 6) professional roles; and 7) enhancing patient-centred care. As well, we identified 34 subthemes within the overarching themes. Most themes applied across all three ecosystem levels and the findings showed interrelationships between the themes and subthemes, as well as across the system levels.

CONCLUSION

Our scoping review revealed numerous barriers and facilitators to interprofessional collaborative practice across the ecosystem levels when health workers provide direct care across settings. The results show that interprofessional collaboration across healthcare entities exhibits distinct features from collaboration within healthcare organizations. The findings point to several recommendations for practice.

22 - Barriers to Care for Visual Deficits After Stroke: Perspectives of Stroke Survivors and Stroke Care Providers in Alberta, Canada

Presenter: Kiran Manhas

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Post-stroke visual impairment (VI) may have deleterious effects on rehabilitation potential, quality of life, psychological health, socialization and risk of falls for 30-85% of stroke survivors. Stroke survivors experience disparities for managing post-stroke VI with ophthalmologists, optometrists and occupational therapists reporting inconsistent knowledge and comfort with approaches to low vision rehabilitation. This study sought to clarify the perspective of stroke survivors and their care providers on post-stroke-VI care experience and gaps in care provision in Alberta, Canada.

APPROACH

In this cross-sectional retrospective observational study, stroke survivors and providers were surveyed to quantify perspectives regarding care received for post-stroke VI. Surveys were developed from qualitative interviews, underwent cognitive interviews, and accessibility testing. Adult stroke survivors and care providers (allied health professionals, nurses, ophthalmologists, neurologists, physiatrists, ophthalmic technologists, orthoptists) were recruited from acute, tertiary rehabilitation, and outpatient clinics across rural and urban settings. Consenting participants completed online or phone surveys from March to August, 2021. Provider and survivor survey data were descriptively analyzed separately, but brought together in final narrative synthesis.

RESULTS

46 stroke survivors (mean age 63 years) participated an average of 27 months post-stroke. Ninety-five percent of stroke survivors reported manifestations of post-stroke VI including: visual field loss (67%), blurred vision (50%), impaired reading (37%), and difficulties with object recognition (22%). Two-thirds of stroke survivors received some visual rehabilitation including scanning assistance (39%), computer therapy (33%), and reading strategies (26%). 68% of survivors felt satisfied with the management of their post-stroke VI; satisfaction levels were lowest in acute (29%) and inpatient rehabilitation (44%) versus outpatient care (63%). Among 87 stroke-care providers (41% allied health), most (81%) reported comfort with screening for post-stroke VI but less than a third felt communication and referral processes were adequate. Few providers found educational resources (18%) and tools (16%) adequate.

CONCLUSION

Stroke survivors in Alberta were generally satisfied with the management of their visual disturbances, but levels of satisfaction with vision care and provider collaboration were lowest in the acute care and inpatient rehabilitation settings. Stroke care providers expressed dissatisfaction with available resources and tools for post-stroke VI in Alberta. There was consensus among stroke survivors and providers that a provincial pathway was needed to optimize equitable access to care.

23 - Benefits and challenges of “Resilience Coaching” - an embedded staff support program for hospital based healthcare workers during the COVID-19 pandemi

Presenter: Benjamin Rosen

THEME: Health Human Resources

BACKGROUND AND OBJECTIVES

The COVID-19 pandemic has created severe challenges with health and human resources. Clinicians from the Psychiatry Department at Sinai Health responded to the acute need for staff support by implementing a program called “Resilience Coaching”, designed to bolster frontline healthcare workers’ resilience and wellbeing. Coaches are equipped with principles of pandemic resilience, and offer opportunities for emotional expression and decompression, collaborative advocacy and education about stress

APPROACH

An embedded research project into the “Resilience Coaching” program began in October 2021. A research team comprised of 5 coaches and 2 researchers conducted qualitative research into the experiences of providing and experiencing “Resilience Coaching.” In total, 37 interviews were conducted and analysed for themes using a grounded theory approach. This paper summarizes results from the interviews with Resilience Coaches and staff who participated in “Resilience Coaching.”

RESULTS

“Resilience Coaching” was an initiative that was well regarded by participating staff. Staff noted appreciation for the opportunity to connect with colleagues, learn and practice coping skills and identified need for further support. They also valued the opportunity to decompress during a workday, and receive assistance in connecting to clinical mental health care when needed. Challenges related to logistics, such as finding time to participate. For coaches, the intervention was meaningful, and provided a sense contribution to the pandemic response. Challenges for coaches were in the area of scheduling and logistics, role tensions, and working while experiencing personal burnout.

CONCLUSION

“Resilience Coaching” is a program that has provided staff with important support during the COVID-19 pandemic. Further research is required to explore the extent to which it is transferrable to new contexts, and how to engage more staff.

24 - Black nurses in the nursing profession in Canada: A scoping review

Presenter: Chelsa States

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

Historical records indicate a legacy of racism and discrimination in nursing that continues to impact Black nurses. Recently, the nursing profession began to reckon with anti-Black racism in Canada, and the residual effects. This scoping review charts the existing evidence on Black nurses in the nursing profession in Canada. The guiding question for this review was 'what evidence exists regarding Black nurses in the nursing profession in Canada?"

APPROACH

This scoping review was conducted in accordance with JBI methodology, involving a search of peer-reviewed evidence as well as unpublished and gray literature. Sources were considered for inclusion if they met the eligibility criteria outlined in the a priori protocol including: 1) focus on Canada, 2) Black nurses in Canada and 3) focus on nursing practice. No restrictions were placed on date of publication. Language was limited to English and French. All screening and extractions were completed in Covidence by two independent reviewers.

RESULTS

The database search yielded 688 records. Seven sources were identified through gray literature search and 338 from citation search. After removing duplicates, 600 titles and abstracts were screened for eligibility and 127 advanced to full-text screening. Eighty-two full-text articles were excluded, for a total of 44 sources meeting the inclusion criteria. Subsequently, 31 sources underwent data extraction. Of the 31 sources, 18 are classified as research (n=18), six are commentaries (n=6); one report (n=1) and five are classified as announcements, memorandums or policy statements (n=5). Research designs included qualitative, quantitative and mixed methods. The review findings are classified in five categories: racism (n=12); history (n=2); leadership and career advancement (n=7); immigration (n=4); and diversity (n=4).

CONCLUSION

This review charts the current available evidence pertaining to Black nurses in the nursing profession in Canada. This review offers suggestions for future research as well as insight regarding anti-Black racism and discrimination in nursing.

25 - Child and Adolescent Mental Health Services: Learnings from Virtual Care during COVID-19

Presenter: Leslie Anne Campbell

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Prior to the pandemic, the uptake of virtual mental health care was limited. While promoted as a means of improving access to services, the technology was not perceived to be user friendly or able to offer quality comparable to that afforded by face-to-face care. The pandemic necessitated a rapid shift to virtual mental health care, and a need to understand why it appeared to offer benefits for some clients and clinicians, but not all.

APPROACH

We employed an iterative, pragmatic multi-methods approach, incorporating routinely collected administrative health data, system metrics, and key informant interviews to identify barriers and facilitators to the readiness and uptake of virtual care, and to understand the experiences of children, adolescents, families, clinicians and staff using virtual care in a pediatric mental health service setting. We took advantage of existing continuous quality improvement activities, adding qualitative sources to promote data richness and allow for methodological triangulation. Interviews were coded to identify themes and patterns of similarity or divergence across the data sources, respondent type, or other relevant characteristics.

RESULTS

Participants (n=48) in semi-structured interviews included 9 young clients, 10 parents/caregivers, 21 clinicians, and 8 administrative staff. Overall perceptions of virtual care were that it is useful as a supplementary tool to in-person services in providing mental health care. Five themes emerged regarding drivers of virtual mental health care including the pandemic wave, client characteristics, clinician characteristics, type of appointment, and organizational policies and resources. Decisions regarding modality considered appointment complexity, therapeutic alliance, and convenience for client and clinician. Choice of modality was influenced by client preference during lower COVID-19 activity and required greater clinical justification at peaks. The nature of some presenting concerns made virtual care more challenging. Organizational policies and messaging were present, but participants identified a need for more structured guidance.

CONCLUSION

A hybrid model of mental health services is supported. Decision-making about treatment modality needs to weigh multiple factors and be a shared decision that considers more than access to a device and convenience. Understanding what works for whom and when is important for ensuring accessible, safe, and high-quality care.

26 - Co-designing mental health conversations at the point-of-care in the home and community context

Presenter: Elizabeth Kalles

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Stigma toward both aging and mental health has been reinforced during the COVID-19 pandemic, as concerns rise about exacerbated mental health needs of aging Canadians and inequitable access to services based on geography, ethno-cultural differences, gender identity and other factors. To build a more resilient health and social care system for the future, it is essential to better integrate opportunities for mental health conversations into already occurring support, care and treatment interactions across the continuum.

APPROACH

Recent work identified skill building for health and social care providers and user-friendly evidence-based tools to recognize signs of positive and poor mental health as key research priorities according to Canadians. We will apply a participatory research framework to co-design community mental health conversations at the point-of-care. This three-phase study will include: 1) pan-Canadian online workshops to validate an evidence-based framework for describing mental health along a continuum with older adults, caregivers and community health providers; 2) co-design sessions in six sites across 3 provinces, leveraging existing evidence-based tools, resources and available training; and 3) pilot and feasibility testing.

RESULTS

The anticipated results of this study include: 1) the development of a sustainable pan-Canadian working group of researchers, collaborators, knowledge users, and experts-by-experience (older adults, caregivers and health and social care providers) to guide and learn from each other throughout the project; 2) an evidence-based mental health conversation approach customized to community point-of-care interactions between health and social care providers and older adults; 3) an implementation plan to guide scale and spread of mental health conversations across Canada, with ideas for customization required by province and in rural and urban contexts; and 4) a preliminary understanding of the potential positive effects of enhanced mental health conversations in community care on measures of individual resilience including improved help seeking behaviours and quality of life.

CONCLUSION

This study directly responds to the research priorities identified by aging Canadians during the COVID-19 pandemic. Stimulating more evidence-based mental health conversations at the point-of-care in community settings across Canada can help combat stigma towards aging and mental health, enhance provider confidence, and begin to address system access barriers.

27 - Collaborating with patient partners to model clinical care pathways for major depressive disorder: mixing evidence and experience

Presenter: Mary Bunka

THEME: Patient and Public Engagement

BACKGROUND AND OBJECTIVES

While including patient partners in the design and development of simulation models is encouraged for the robustness of results, it is uncommon and there is a scarcity of guidelines or “best practices” for patient-partnered modeling. We present the steps we took to form an effective partnership with patients to design a microsimulation-Markov model of depression care pathways in British Columbia with the hope that it will encourage other teams to form similar partnerships.

APPROACH

We began our partnership by acknowledging that no clear guidelines existed for this type of partnership, thus we would need to be flexible and understanding. Key aims for collaboration included being respectful of one another’s time and supporting the patient partners to provide the expertise that comes with lived experience. We retrospectively found that our cooperative approach could be sorted into three unique phases: uncertainty, mapping, and collaboration, each of which we describe. We also present key perspectives from both the modeler and the patient partners and describe the unique contributions the patient partners made throughout the project.

RESULTS

During the “uncertainty” phase, the patient partners and modeler outlined their motivations and hopes for the model. In the “mapping” phase, patient partners made distinct contributions to the modeling process, setting up a framework for working together effectively (for example, by changing the way meeting materials were distributed). In the “collaboration” phase, the patient partners contributed to the model itself by checking assumptions, noting limitations, and suggesting areas for future research, which was an unexpected but immensely valuable benefit of their participation. Both the patient partners and the modelers were satisfied with the partnership and agreed that the model was strengthened by the diverse experiences of the team behind it.

CONCLUSION

Collaborating with patient partners resulted in a more robust model and an enriched modeling experience. While not a set of “best practices” for collaboration, we hope that our experience will serve as a scaffold that other teams can work within to produce guidelines for patient-partnered modeling in healthcare and beyond.

28 - Collaborative Implementation of eMental Health and Addictions Services in Nova Scotia

Presenter: Lori Wozney

THEME: Collaborative Healthcare Improvement Partnerships

BACKGROUND AND OBJECTIVES

As people increasingly use the internet to inform health care choices, it is vital mental health and addictions organizations connect with the public in online spaces. Nova Scotia Health's Mental Health and Addiction Program partnered with the Mental Health Commission of Canada and other partners in late 2019 on a quality improvement initiative to bring recovery-oriented, eMental Health and Addictions (eMH) services into the provincial stepped care model of service delivery.

APPROACH

The project brought together researchers, policymakers, community partners, external funders, people with lived expertise and health system decision-makers to increase access to quality eMH services across the province. The two-year project employed a phased approach based on a hybrid- implementation/evaluation model. Key methods and approaches included: varied opportunities for community engagement; needs-based planning; digital equity assessment, establishment of a governance structure for eMH service planning; development of procurement criteria and standards for accountability; an evaluation framework including logic model and key performance indicators; and an integrated knowledge exchange and promotion plan to support system level learning.

RESULTS

The initiative has met all three of its major objectives: delivering new low barrier eMH services to Nova Scotians, building public awareness about the credibility and potential benefits of eMH services in the journey of mental wellness and recovery, and strengthening eMH collaboration across the care continuum. Over 1300 individuals were engaged in opportunities for input and feedback on service planning during the project. The new bilingual site (MHAhelpNS) sees over fourteen thousand visitors on average a month and connects people to both online and offline supports and programs in their community. Over ten thousand Nova Scotians have signed up for an eMH services, completing thousands of self-directed, peer-supported, and coached sessions on topics and skills that can benefit their mental health and substance use issues.

CONCLUSION

Through strong interdisciplinary planning approaches, cross sector collaboration, knowledge exchange and strategic partnerships the project achieved significant system transformation and greater scale than ever in access to mental health and addictions supports to Nova Scotians along a stepped care continuum.

29 - Communication challenges experienced by healthcare workers providing care to older adults with dual sensory impairment (DSI) during COVID-19

Presenter: Shreya Budhiraja

THEME: COVID-19

BACKGROUND AND OBJECTIVES

Around 1.1 million Older Canadians are living with hearing and vision impairment (or dual sensory impairment/ DSI). Ineffective communication is a significant barrier to access healthcare services experienced by individuals with DSI. COVID-19 gave rise to unique challenges for healthcare workers providing healthcare services to older adults with DSI. This study aimed to explore the communication challenges experienced by healthcare workers providing care to older adults with DSI during COVID-19.

APPROACH

An online survey study was conducted across Canada to capture the responses of healthcare workers working with older adults with DSI. The data consisted of survey responses from 228 healthcare workers collected through Lime Survey. The quantitative and qualitative data were analyzed using SPSS and NVIVO software, respectively.

RESULTS

The majority of respondents worked in Quebec, Ontario, Alberta, and British Columbia. 90.4% of respondents reported that COVID-19 negatively affected care delivery to older adults with DSI. They identified the use of masks and personal protective equipment posed communication challenges since it prevents lip-reading, creates muffled sounds, and fogging of glasses. Two-thirds of respondents felt that healthcare workers are not adequately trained to meet the communication needs of this population in pandemic situations, such as COVID-19. Only one-fifth of respondents completed training on the use of assistive devices (such as pocket talker) to provide communication support to their older patients with DSI.

CONCLUSION

The study findings highlight that the pandemic negatively affected the care for older adults with DSI, mainly due to communication challenges. To ensure effective healthcare communication and optimal care experiences, there is a dire need for training on DSI-specific communication challenges and needed support for healthcare workers and family caregivers.

30 - Comparison of Delay in Discharge Rates Before and During the COVID-19 Pandemic Among Persons Admitted in Acute Hospital Care in Ontario, Canada: An Interrupted Time Series Analysis

Presenter: Sara Guilcher

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

During the early phase of the spread of COVID-19, hospitals across Canada quickly adopted processes to reduce in-patient occupancy, such as among persons hospitalized with a delay in discharge (also known as Alternate Level of Care, ALC). Persons become ALC when they have completed their medical treatment but remain in hospital because they are unable to transition to the next point of care. Care usually decreases as individuals wait for their next transition, which often exacerbates a heightened risk of functional decline, and hospital-related harm (e.g., falls and infection). Our objective was to examine the impact of COVID-19 pandemic on ALC rates in Ontario, Canada.

APPROACH

We conducted an interrupted time series using linked administrative data. Persons admitted to an acute hospital in Ontario, Canada between June 1, 2019 and November 30 2020 were included. The exposure was the onset of COVID-19 as of March 1, 2020. The outcome was a monthly delayed discharge rate, calculated by the total number of delayed discharge patients per the total number of discharges per month multiplied by 100. We used segmented regression analysis to examine the association of COVID-19 on delayed discharge rates.

RESULTS

We identified 882,727 admissions (43,392 with delayed discharges, 4.91%) during the pre-COVID-19 period and 775,981 admissions (38,200 with delayed discharges, 4.92%) post COVID-19 onset. Standardized differences were less than 10% on clinical and demographic characteristics of the individuals admitted pre and post COVID-19 onset, suggesting no meaningful differences. On visual inspection of trends, there was an initial drop of delayed discharge rates to 4.3% during the month of March 2020. However, our interrupted time series model showed no significant level or slope changes on delayed discharge rates during the observation window [parameter estimate = 0.27; standard error = 0.34, p value > 0.05].

CONCLUSION

We identified continued high ALC rates despite the substantial efforts in hospital to reduce hospital occupancy during COVID-19, which raises the importance of cross-sector for ALC prevention. The rapid discharges for these individuals may have resulted in negative health outcomes, which warrants further exploration.

31 - Compliance to health technology assessment recommendations: A two-decade experience

Presenter: Eva Suarthana

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

The Health Technology Assessment Unit of the McGill University Health Center was established in 2001 to support evidence-based usage of health technologies, i.e., drugs, devices, or procedures at our hospital. We conducted an evaluation of the policy and economic impact of health technology assessment (HTA) recommendations on hospital practice.

APPROACH

We contacted clinical heads, medical archivists, and the McGill University Health Center data warehouse to follow-up on recommendations issued for 60 technologies regarding (1) the current status of the technology; (2) detailed description of patient selection criteria for each intervention; (3) average number of patients who received the intervention per year; (4) reason for stopping or non-implementation (safety, effectiveness, ethics, legal, and/or budget issue). Policy and budget impact will also be determined from hospital clinical-administrative data from finance.

RESULTS

Of 60 evaluated technologies, we obtained follow up data from 57 (95%) of them. Of 20 technologies that received approval for routine use, 15 (75%) are currently used. Of 26 technologies with conditional or restricted-use approval, 14 (53%) are used with indications. All technologies approved in a research setting were used in research context. All non-approved technologies are not used. Of 38 technologies that are currently used, data have been collected for 15 (40%) of them while 8 (20%) are unknown. Budget impact analysis is ongoing.

CONCLUSION

This exercise emphasizes the need for regular follow-up of HTA reports to ensure proper compliance with recommendations for evidence-based use and mandated collection of valid and reliable data.

32 - Consensus out of chaos: Finding the way to quality healthcare across the continuum for persons after neurotrauma

Presenter: Judith Gargaro

THEME: Health Policy, Healthcare Reform (includes priority setting, politics)

BACKGROUND AND OBJECTIVES

Ontario lacks an equitable system of care for traumatic spinal (SCI) and/or brain (TBI) injuries, where quality of care and health outcomes depend on where you live, available funding and severity/type of injury. Quantifying the size and impact of this problem is difficult due to non-standardized care pathways used by healthcare providers. The goal of the project is to develop an evidence-based standardized neurotrauma care pathway for all Ontarians living with SCI and/or TBI injuries.

APPROACH

Key stakeholders from across the province developed evidence-based ideal care pathways for concussion, moderate-severe TBI and traumatic SCI. Stakeholders (101) included people with lived experience, clinicians, researchers, funders, and community providers from different sectors. Acute, Rehab, and Community working groups reviewed published literature and selected building blocks for the pathway. We focused on key elements (“the what”; e.g., access to primary care), not specific recommendations (“the how”; e.g., hours of therapy). A fourth working group focused on Critical Considerations related to care planning and provision (e.g., geographic location, marginalized populations). Building blocks were translated into injury-specific pathway diagrams.

RESULTS

Three subcommittee meetings, 1 one-day virtual summit, and 20 working group meetings were held as of January 2022. The Acute group focused on appropriate assessment, initial management and transition planning; the Rehab group on access to specialized rehab and assessment and planning of community needs; the Community group on community follow-up, mechanisms for re-access and holistic support for patients and families; and all groups on those at-risk. We have brought together the most comprehensive group of stakeholders to date, including health planners and government representatives. The Ideal Pathways have been developed through consensus and strategies are being developed to prioritize implementation, focusing on regional realities and how and when changes should be implemented to ensure equitable quality evidence-based care for all Ontarians after neurotrauma.

CONCLUSION

Considering the representative and diverse group of stakeholders engaged in this project and the availability of neurotrauma-specific clinical practice guidelines, we are moving forward with implementation activities to standardize care provision reducing the inequities in neurotrauma care across the province.

33 - COVID-19 and the duration of operating room procedures in Ontario: A population-based retrospective study

Presenter: Nadine Chami

THEME: COVID-19

BACKGROUND AND OBJECTIVES

Studies have estimated a large backlog of procedures generated by emergency measures implemented in Ontario, Canada at the onset of the coronavirus disease 2019 (COVID-19) pandemic wherein non-essential and scheduled procedures were postponed. Understanding the impact of COVID-19 on the time needed to perform a procedure may help determine the resources needed to tackle the substantial backlog caused by deferred cases.

APPROACH

A population based, retrospective cohort study was conducted using Ontario Health Insurance Plan claims data, and other administrative healthcare datasets, from the period April 1, 2019 to September 30, 2020. Statistical analysis was conducted using multivariate regression, with procedure duration as the outcome variable.

RESULTS

Results showed that average procedure duration for non-elective procedures increased 34 minutes during the COVID-19 period and 19 minutes after the resumption of scheduled procedures. Controlling for physician, patient, and hospital characteristics, and the procedure code submitted, procedure duration increased by 12 minutes (14%) for non-elective procedures and by 5 minutes (5%) for scheduled procedures compared to the pre-COVID-19 period.

CONCLUSION

Procedures may take longer in the COVID-19 period. This will impact the already increased wait times due to deferred procedures at the beginning of the pandemic, and Ontario’s ability to provide patients with timely care.

34 - COVID-19 Planning and Responses: Calls for equitable approaches for urban Indigenous peoples

Presenter: Shannon Field

THEME: Indigenous Health

BACKGROUND AND OBJECTIVES

The Canadian and BC governments rapidly instated several strategies to limit COVID-19 transmission, including the closure of businesses and services, and the implementation of physical distancing measures. For Indigenous peoples who are disproportionately affected by intersecting factors which amplify the impacts of health emergencies, there are concerns around how this has impacted their health and healthcare access. This has led to calls for an equitable response to the pandemic and establishing Indigenous-specific pandemic response plans.

APPROACH

Using Two-Eyed seeing methodology we combined Indigenous and Western ways of doing research. We conducted interviews and an online survey, keeping in mind Indigenous principles and teachings. We reached out to health and social service leaders and staff across Vancouver who worked with a high proportion of Indigenous patients/clients, many of whom were Indigenous themselves. We further discussed the results with an advisory committee consisting of those in the participant pool, which helped us to interpret the findings, and ensure the context of the data remained, providing valuable insight.

RESULTS

After speaking with health and social service staff across Vancouver, we found the majority believed that responses to the pandemic were confusing and did not meet the needs of Indigenous peoples. Additionally, over 85% believed that it would be beneficial to have an Indigenous specific plan, with many participants calling for the inclusion of Indigenous leadership in pandemic planning and across healthcare. Amplified by the pandemic, participants acknowledged that racism needs to be addressed in order to have better healthcare for Indigenous peoples. Participants also recommended a better network of communication between governments, authorities, community organizations, and community members to avoid confusion, misinformation, and duplication of work. Lastly, participants called for more resources to support patients/clients, like access to PPE, technology, and mobile health vans.

CONCLUSION

As the pandemic continues, we need to ensure Indigenous cultural safety and equity-informed decision making is occurring. This involves having more Indigenous leadership in pandemic planning as well as across the healthcare system. Communication networks also need to be improved to ensure that pandemic information is shared timely and accurately.

36 - Decomposition Analysis of Gender Pay Gaps Among Psychologists in Canada

Presenter: Adrienne Gulliver

THEME: Health Human Resources

BACKGROUND AND OBJECTIVES

Female healthcare practitioners worldwide face gender-related challenges like pay gaps. Early research on the Canadian psychologist workforce highlights differences in earnings between women and men, which may adversely affect the quality of patient care; however, evidence to inform policy to optimize gender equity in the health workforce is limited. The objective of this research is to investigate the drivers of gender-related pay gaps among psychologists in Canada to support evidence-based and gender-responsive health workforce financing policy.

APPROACH

Microdata from the 2016 Canadian Population Census was accessed from the Statistics Canada Research Data Centre (RDC) at the University of New Brunswick. Microdata is analyzed with linear regression models to decompose trends in employment income differences by sex (male/female), traditional labour market measures (e.g., education), and components of the motherhood penalty model (e.g., presence of children, marital status). The adjusted gender pay gap is estimated using the Oaxaca-Blinder decomposition method which compares differences in male and female earnings as a function of two components; an explained portion and an unexplained residual. The psychologist workforce is identified through the National Occupational Classification.

RESULTS

It is hypothesized that traditional labour market measures will not fully explain the persistence of gender-related pay gaps between male and female psychologists in Canada, and that additional factors associated with motherhood earning penalties and fatherhood earning premiums will offer a more comprehensive explanation for these gaps. The anticipated results of this study will be released by the time of this conference. The findings will shed light on factors that contribute to the persistence of gender pay gaps within the psychologist workforce and highlight the need for greater focus on gender equity and gender-responsive health workforce policy, ultimately resulting in better mental health services provision in Canada.

CONCLUSION

This research will help to measure and explain the gender-related pay gap within the Canadian psychologist workforce, an area where research is outdated and limited. Results will support the need for greater implementation of gender-based health workforce analyses to inform gender-transformative health system policies.

38 - Demographic and socio-structural factors associated with non-fatal overdose among patients enrolled in the OPTIMA trial

Presenter: Hannah Crepeaut

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

In recent years, the number of fatal and non-fatal overdoses (NFO) has continued to climb in North America, with prescription-type opioids and fentanyl analogues being primary contributors. Currently, little is known about correlates of NFO among treatment-seeking individuals with prescription-type opioid use disorder. The present study examines individual and social-structural factors associated with a lifetime history of non-fatal overdose among individuals with prescription-type opioid use di

APPROACH

Data were drawn from OPTIMA, a multicenter, pragmatic, open-label, two-arm randomized control trial comparing supervised methadone and flexible take-home dosing buprenorphine/naloxone models of care among adults with POUD conducted at seven Canadian hospitals and community-based clinics between 2017 and 2020. Bivariable and multivariable logistic regression were used to determine factors associated with a lifetime history of non-fatal overdose among participants enrolled in the trial.

RESULTS

A total of 271 participants were included in the present study, with 158 (58.1%) reporting an overdose event in their lifetime. Of those with a history of NFO, 86 (54.4%) reported having a non-fatal overdose in the last six months. In multivariable analyses, positive urine drug screen (UDS) for methamphetamine (Adjusted Odds Ratio [AOR] = 3.16; 95% confidence interval [CI]: (1.59 to 6.56), positive UDS for fentanyl (AOR = 2.26; CI: (1.01 to 5.10), receiving income assistance (AOR = 2.00; CI: (1.09 to 3.73) and currently not having housing (AOR = 2.38; CI: (1.26 to 4.57) were positively associated with a lifetime history of NFO.

CONCLUSION

Our research found a high proportion of treatment-seeking adults with POUD in Canada with a history of non-fatal overdose. NFO strongly associated with current use of methamphetamine and fentanyl as well as social-structural marginalization, highlighting the need for individualized care to address the concurrent use of other substances and mitigate future overdose.

39 - Describing Patterns of Medication and Healthcare Use among Construction Industry Workers who Died of Acute Opioid Toxicity in Ontario

Presenter: Anita Iacono

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Research describing characteristics of people who died of acute opioid toxicity in Ontario found that, among cases among individuals known to have been employed, nearly one-third of deaths between March and December 2020 occurred among people who were employed in the construction industry. A similar pattern has been observed in British Columbia. We sought to describe circumstances surrounding death, healthcare interactions, and clinical characteristics of construction workers who died of acute opioid toxicity in Ontario.

APPROACH

We will conduct a cross-sectional study of all opioid-related deaths that occurred between January 1, 2018 and December 31, 2020 among Ontarians who were actively or previously employed in the construction industry prior to death. We will use linked healthcare and demographic databases from ICES to describe demographics (age, sex, location of residence, neighbourhood income quintile), circumstances surrounding death (manner of death, types of opioids and other substances contributing to death), medication history (prescription opioid, benzodiazepine, and stimulant use), and patterns of healthcare use (types of recent healthcare interactions, and history of chronic pain and mental health disorders).

RESULTS

Preliminary results identified a total of 396 opioid-related deaths between January 1, 2018 and December 31, 2020 that occurred among individuals known to have been employed or previously employed in the construction industry. The majority of opioid-related deaths among individuals employed or previously employed in the construction industry were male (95.7%), between the ages of 25 to 44 years (60%), and were employed at the time of death (58.6%). Fentanyl (78.8%) was the most common opioid that directly contributed to death. When considering non-opioid drugs that were directly involved in opioid toxicity deaths, cocaine (43.2%) and methamphetamine (26.8%) were the most common. The full study results will be available for presentation at the conference.

CONCLUSION

Preliminary data suggests unique impacts from acute opioid-related toxicity within the construction sector. By thoroughly describing the circumstances and characteristics of opioid-related deaths among people employed in the construction industry, this study will inform preventative strategies and targeted support programs to address opioid-related toxicity in the construction industry.

40 - Describing transition in care pattern between hospital and home using administrative health data from Ontario

Presenter: ?Xiaomeng Ma

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Poorly managed transitions between hospital and home result in avoidable hospital admissions, ED visits and patient distress. Understanding patterns of care prior to and following hospitalization is essential to identify priorities to improve patient flow and the safety of care transitions in Ontario. The objective of this study is to characterize transitions in care between hospital and home and to determine the association between the mix of health care services received following hospitalization and ED visits/unplanned hospitalizations.

APPROACH

We conducted a population-based retrospective cohort study of patients admitted from the community and discharged from medical and surgical units in Ontario hospitals between March 1, 2016-February 28, 2017. Administrative healthcare databases from the Ontario Ministry of Health were analyzed. Patterns of patient care were measured by identifying the care setting 30-days prior to the index hospitalization (home in community, receiving home care, long term care, rehabilitation) as well as in the 30-days following discharge. Patients were followed until ED visit, unplanned re-hospitalization or death in 30-days following discharge. Multivariable time varying Cox models were used to determine the association between post-discharge care setting and risk of ED visits.

RESULTS

459,610 patients included in our study, mean (SD) age was 64 (SD 18), 52% were female and 61% were discharged from a medical unit. 78% of patients were admitted from home, 10% were receiving homecare, 9% were in a rehabilitation facility and 4% were admitted from long term care. The four most common patterns of care following discharge included patients being discharged home without any supports (61%); home care (29%); long term care (2%); rehabilitation (2%). 108,900 (24%) patients visited the ED in 30-days post-discharge. After accounting for patient severity and institution, patients receiving home care had the highest risk of ED visits 30-days post discharge (of all other care settings) when compared to those who were discharged home (adjusted hazard ratio: 2.01, 95% CI:1.94-2.06).

CONCLUSION

Patients receiving home care were the most likely to visit the ED in 30-days compared to all other cares settings. These results suggest that the provision of home care services following discharge may be a priority to improve the safety of transitions between hospital and home.

41 - Developing a Health Equity Measurement Approach in Northern Ontario

Presenter: Grace Spiro

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

The current climate in Ontario is one where access to health/social services and opportunities for health vary widely across the province. Existing indicators used to measure this variability have been developed within the context of health systems in densely populated areas and may not be relevant for more remote geographies. The objective of this research was to develop a health equity measurement approach that better reflects the realities of health opportunities in Northern Ontario.

APPROACH

Through interviews with key informants, each with a unique set of expertise contributing to rural and northern health, a qualitative inquiry was conducted. During semi-structured interviews, key informants were asked to review the health indicators in existing provincial and pan-Canadian health indicators suites and propose quality indicators best suited to study health equity in Northern Ontario. Two simultaneous streams of analysis took place. The first was a theoretical thematic analysis of the interview text guided by the WHO social determinants of health conceptual framework, and the second a text analysis of indicators.

RESULTS

In total, eight telephone interviews were completed in full and transcribed verbatim. The interview transcripts were exported into MS Excel as 263 distinct phrases of text. Overall, 316 codes were applied to the 263 fragments of text. Interrater reliability was found to be 83%. The thematic analysis revealed four main themes: structural determinants, intermediary determinants, products and health equity. The text analysis revealed 15 distinct health equity indicators for consideration. Of these, four health equity indicators and two health equity stratifiers were prioritized for future health equity measurement approaches in Northern Ontario. These included patient experience, infant mortality, life expectancy and perceived health as indicators, and geographic position (rurality) and material welfare (income) as stratifiers.

CONCLUSION

Individuals residing in Northern Ontario may have complex needs that are distinct from the province. Considering the weight of standardized metrics on policies and decision making, it is important that the metrics measure what they are designed to measure, and that they measure the same thing in various contexts.

42 - Developing Consensus Recommendations to Inform the Design of “Sick Day” Medication Guidance Interventions: Healthcare Providers Opinions’ using a Modified Delphi Process

Presenter: Eleanor Benterud

THEME: Chronic Disease Management

BACKGROUND AND OBJECTIVES

Medications are crucial for the management of many chronic conditions. Several guidelines recommend that some medications be stopped or adjusted during times of acute dehydrating illness, referred to as sick day medication guidance (SDMG). However, there is variability in recommendations from different societies.

Our objective was to develop clinically informed recommendations for SDMG for patients with diabetes, kidney, or cardiovascular disease to be implemented in a research program.

APPROACH

An initial review of the results from a scoping review identified areas of inconsistencies in SDMG guidelines. A modified Delphi process was conducted, using three sequential rounds of structured questions derived from the scoping review results. Expert clinicians (physicians, nurses, pharmacists) and patient partners were involved. Patient partners did not vote but provided insight on discussion points. Each round consisted of a 2-hour virtual meeting to allow participants to provide input, voice opinions, rapidly prioritize and refine ideas. Mentimeter Interactive Software was used to vote and review results in real time. Consensus was defined by ≥70% agreement on a recommendation.

RESULTS

There were 25 clinician participants (13 women, 12 men) from Canada, USA, UK, and Australia providing expertise in primary care, internal medicine, emergency medicine, pharmacy, endocrinology, nephrology, cardiology, and nursing. The panel achieved consensus on 42 recommendations for SDMG including 10 on symptoms or signs that should trigger sick day guidance, 15 related to components of SDMG that should be provided to patients, and 17 related to specific medication adjustments for SDMG. For patients with diabetes, the committee felt that more frequent self-monitoring and titration of antihyperglycemic medications based on individual blood glucose readings was more appropriate than empiric dose changes.

CONCLUSION

We used a modified Delphi to engage experts to refine recommendations. This process resulted in 42 recommendations regarding specific trigger symptoms, medications to withhold, and other direct guidance to be provided as part of SDMG. The results will guide the development of a future intervention to be implemented and evaluated.

43 - Development and evaluation of a palliative approach to care (PA2Care) curriculum co-designed with social care workers for supporting persons experiencing homelessness through their end of life

Presenter: Elizabeth Kalles

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

For persons experiencing homelessness, access to palliative care and services can be difficult and complicated by issues like long-standing institutional distrust and discrimination. To provide a bridge to appropriate care, a co-designed training program includes information, approaches, and resources for social care workers, who often are a key, trusted and non-judgmental contact for persons experiencing homelessness. The training program was piloted and evaluated in 3 cities in Canada over a 10-month period.

APPROACH

Created using a participatory co-design approach with people from various perspectives, this training program consists of an online e-learning module, an in-person workshop, and an on-the-job guide/website. Topics include education about a palliative approach to care, identifying and supporting a person's health needs, navigating the health care system, legal/financial resources, and dealing with grief and bereavement. In 3 cities across Canada (Toronto, Calgary, Thunder Bay), 24 training workshops were held. Mixed methods analysis was conducted by integrating survey responses, and open-ended feedback to evaluate the extent to which the program met co-designed value statements and fulfilled learners' expectations and needs.

RESULTS

Triangulation of the quantitative survey responses with qualitative free-form answers indicates that participants largely felt the curriculum met their values and educational needs. Participants felt both the online and in-person components strongly met the values of cultural humility and being relationship-driven, and almost all indicated they would apply some part of the training program in their work going forward. Responses emphasized the importance of engaging workshop facilitators with knowledge about the local context and resources to tailor certain aspects of the training. Additionally, some learners indicated that a mixed online and in-person curriculum was not their preferred method of learning, while quantitative analysis indicated a near universal increase in self-reported knowledge, attitudes, and confidence among all participants at course completion.

CONCLUSION

Social care workers can provide valuable end of life care services to individuals experiencing homelessness. This free training program was co-designed with experts-by-experience and found to largely meet the values and educational needs of learners. Future iterations of the curriculum should support flexible workshops that reflect the local context.

44 - Development and Evaluation of the Dietary Pattern Calculator (DiPaC) for Personalized Assessment and Feedback

Presenter: Mahsa Jessri

THEME: Knowledge Translation & Exchange (includes KTE methods)

BACKGROUND AND OBJECTIVES

Most dietary assessment tools have a long completion time or impose a high participant burden. Brief screeners examining fewer foods have the potential to increase participant uptake. This study aimed to develop and validate a digital short diet assessment screening tool – the Dietary Pattern Calculator (DiPaC) for personalized assessment of diet quality.

APPROACH

A scoping review identified currently available short diet quality assessment tools. Then, 24-hour dietary recalls from the nationally-representative Canadian Community Health Survey (CCHS)-Nutrition 2015 (n=19,400) were used to derive and validate a personalized dietary pattern informed by the scoping review using weighted partial least squares. Dietary pattern assessment was used to create and evaluate DiPaC following an Agile and User-Centred Research and Development approach and through patient and public engagement.

RESULTS

Twenty-one articles covering 19 unique tools were included in the scoping review. The tools mainly focused on individual nutrients or food groups or were developed for a specific population, few ascertained overall dietary patterns. The dominant dietary pattern in CCHS-Nutrition 2015 was characterized by high consumption of fast-foods, carbonated drinks, and salty snacks and low consumption of whole fruits, orange vegetables, other vegetables and juices, whole grains, dark green vegetables, legumes, and soy (Figure). DiPaC, which demonstrated high validity and intermediate reliability (internal consistency=0.47-0.51), is publicly available at www.projectbiglife.ca. (Currently https://projectbiglife.webflow.io/dietary-pattern-home Password: v9n1J3)

CONCLUSION

DiPaC can be used by the public, clinicians, and researchers for quick and robust assessment of diet quality, providing immediate feedback with the advantage of being easy to implement. Future directions include government and health care system implementation of DiPaC to inform policy and triage referrals to dietitians.

45 - Development and Evaluation Protocol of a Novel Care Rehabilitation Pathway for Post-COVID Conditions in a Provincial Health System in Alberta, Canada

Presenter: Kiran Manhas

THEME: COVID-19

BACKGROUND AND OBJECTIVES

Post-COVID conditions (PCC) are common, diverse, and pervasive symptoms experienced by 10-40% of COVID-19 survivors. Systematic reviews have found over 100 symptoms, which can be supported through rehabilitation, while medical management is less-consistently required. Health systems are urged to better prepare for PCC by developing patient co-designed, multidisciplinary approaches for assessment and management; creating novel care pathways; and developing appropriate resources. Herein, we describe the development of such a framework, and the evaluation protocol.

APPROACH

We used a collaborative, consensus-based approach involving two iterative provincial taskforces in a Canadian provincial health system. The first taskforce (59 multi-disciplinary stakeholders) sought to clarify the requisite facets of a sustainable, provincially-coordinated rehabilitation approach for post-COVID rehabilitation needs based on available research evidence. The second taskforce (129 multi-disciplinary stakeholders) translated that strategy and criteria into an operational framework for provincial implementation. Both taskforces sought to align with operational realities of the provincial health system. The evaluation protocol was co-designed with operational leaders and patient advisors to evaluate implementation of the operational framework at provincial and Zonal (local) levels.

RESULTS

This collaborative, consensus approach developed the Provincial Post COVID-19 Rehabilitation Response Framework (PCRF). The PCRF includes three Care Pathways across the care continuum targeting in-hospital care, continuing care, and community-based care, with three key elements: (a) PCC symptom screening and assessment tools to systematically identify symptoms and functional impairments; (b) pathways to determine patients' rehabilitation trajectory and guide transitions in care; and, (c) patient and provider self-management and education resources. The proposed evaluation aligns to the quadruple aim to consider: (a) patient experience (surveys, interviews); (b) patient and population outcomes by examining access to appropriate resources (outpatient rehabilitation visits; telehealth access; website traffic); (c) health system value for money via health service utilization (emergency department visits); and, (d) provider experience of PCRF implementation (focus groups).

CONCLUSION

The PCRF addresses international mandates to systematically address PCC across the care continuum. The PCRF allows for local adaptation and highlights equity considerations enabling further spread and scale. The proposed evaluation will explore the impact of PCRF implementation on patient outcomes, patient and provider experiences, and health system utilization.

46 - Development of a simulation model of major depressive disorder to evaluate the effectiveness and cost-effectiveness of pharmacogenomic testing as part of routine care in BC

Presenter: Shahzad Ghanbarian

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Major depressive disorder (MDD) is the most common mood disorder worldwide. Currently, in BC, patients often go through a trial-and-error process to find the “right” antidepressant. Pharmacogenomic (PGx) testing can guide prescription decisions to minimize adverse events and cost whilst maximizing medication efficacy. The aim of this study was to develop a simulation model to evaluate the effectiveness and cost-effectiveness of introducing PGx testing in BC as part of routine care for people with MDD.

APPROACH

Key stakeholders including clinical experts, researchers, modelers, and patient partners came together to design and develop a microsimulation-Markov model containing the entire clinical pathway of adults with MDD in BC, including all publicly-funded treatment options and multiple treatment steps. The model was coded with a modular approach to enhance flexibility. The model was populated using multiple original data analyses that were conducted with administrative data in BC, a systematic review, and an expert panel. An extensive cost analysis was performed to capture all direct and indirect medical costs from the public payer and societal perspectives.

RESULTS

The model accommodates both newly-diagnosed and prevalent adult patients with MDD in BC, with and without PGx-guided treatment. The model is comprised of eight modules (entry cohort, demographics, disease progress, treatment, adverse events, hospitalization, payoff (costs and quality-adjusted life-years), mortality). The model has the capacity to incorporate interactive decision nodes to address different implementation strategies for PGx testing along the clinical pathway. The model synthesizes existing information and incorporates new BC-specific data to deliver predictions of benefits and costs associated with PGx testing. These predictions estimate the budget impact, resource utilization, and health gains from alternative strategies. The model is now fully coded and calibration and validation work is nearing completion. Full model results will be presented for the first time at the conference.

CONCLUSION

This model was built to address the policy question relating to pharmacogenomic testing in MDD. However, it can be viewed as an analytic infrastructure to support other policy decisions and facilitate the rapid synthesis of new data for a broader search for efficiency improvements in the clinical field of depression.

47 - Did the COVID-19 pandemic cause family physicians to stop practice? Results from Ontario, Canada.

Presenter: Michael E. Green

THEME: COVID-19

BACKGROUND AND OBJECTIVES

The COVID-19 pandemic forced family practices to change how they delivered care. Practices needed to implement and pay for personal protective equipment, enhanced infection control practices, and infrastructure to adopt virtual care. At the same time, fee-for-service practices experienced a decrease in revenue as non-essential care was discouraged. Our aim was to understand changes in family physician practice patterns and whether more family physicians stopped working during the COVID-19 pandemic compared to previous years.

APPROACH

We used linked administrative data including physician billings, age, sex, rurality of practice, practice model, and panel size. Total physician visits, office visits and virtual visits during March- September 2020 were compared to the same period in 2019. We identified the percentage and characteristics of family physicians with a minimum of 50 billing days in 2019 but no billings during the first six months of the pandemic. From 2010 to 2020, we calculated the percentage of physicians who billed for services in the first quarter of each year but submitted no bills between April and September of the given year.

RESULTS

We analyzed data for 12,247 physicians who were actively practicing in 2019. Mean total visits dropped from 2061 (SD: 1,795) in 2019 to 1703 (SD: 1,674) in 2020 with 66.0% of visits being virtual in 2020. Between March and September 2020, 3.1% of physicians (N = 385) stopped working entirely, compared with an average of 1.6% of physicians between 2010 and 2019. Compared to all study physicians, a higher portion of physicians who stopped work in 2020 were age 75 or over (13.0% vs. 3.4%, $p<0.001$), practicing fee-for-service (37.7% vs 24.9%, $p<0.001$), and had a panel size under 500 patients (40.0% vs 25.8%, $p<0.001$).

CONCLUSION

Approximately twice as many family physicians stopped work during COVID-19 compared to previous years, but the absolute number was small. Our findings suggest COVID-19 may have accelerated retirement plans for a subset of older physicians with smaller, fee-for-service practices. Research is needed to understand the impact on primary care attachment.

48 - Early Career Outcomes of Embedded Research Fellows: An Analysis of the Health System Impact Fellowship Program

Presenter: Bahar Kasaai

THEME: Health Human Resources

BACKGROUND AND OBJECTIVES

The Canadian Institutes of Health Research (CIHR) Health System Impact (HSI) Fellowship is an embedded fellowship program designed to modernize health services and policy research (HSPR) training and optimize the career readiness and impact potential of the future HSPR workforce in the context of learning health systems. The present study reports on the early career outcomes of postdoctoral fellows who received an HSI fellowship between 2017 and 2019.

APPROACH

Employment data of HSI Fellow alumni upon completion of the fellowship were tracked using internet searches of publicly accessible online sources and compared with their career aspirations from a baseline survey completed at the start of the fellowship. Data were entered into a standardized career-tracking template. Descriptive analyses summarized fellows' current employment sectors, roles and locations based on a published HSPR career taxonomy.

RESULTS

Of the 91 unique HSI postdoctoral fellows who were alumni during our study period, 87 were successfully tracked through social media and thus included in the study (96% tracking rate). Descriptive analyses show that all 87 included alumni are currently employed (100% of 87), with 92% employed in Canada. Their employment spans several sectors, including in academic (37%), public (29%), healthcare delivery (17%), and private (14%) sectors. Altogether, 32% of all alumni held hybrid roles with an affiliation in academia and another sector. Across all sectors, the most common position types were senior scientist (42%), professorships (18%), and director, manager or administrator roles (12%).

CONCLUSION

This study explores the diverse career paths stemming from the embedded HSI Fellowship program, suggests that the program elements equip fellows with skills that are valued in HSPR employment sectors/roles, and suggests traditional notions of research impact must evolve to encompass policy and system impacts when considering future directions in building and growing the embedded research workforce.

50 - Emergency department utilization and hospitalizations for ambulatory care sensitive conditions among unattached people actively seeking a primary care provider during the COVID-19 pandemic: A retrospective cohort study.

Presenter: Emily Gard Marshall

THEME: Health Policy, Healthcare Reform (includes priority setting, politics)

BACKGROUND AND OBJECTIVES

Primary care attachment improves healthcare access and prevention and management of chronic conditions. Yet, growing proportions of Canadians are unattached and are signing up on provincial primary care waitlists. Understanding variations in healthcare utilization during COVID-19, and among potentially vulnerable unattached patients, is needed. This study compares emergency department (ED) utilization and hospitalization among those on and off a provincial primary care waitlist during the first two waves of COVID-19.

APPROACH

The Nova Scotia centralized primary care waitlist and administrative health data were linked to describe persons ever/never on the waitlist between January 1, 2017 and December 24, 2020. ED utilization and ambulatory care sensitive conditions (ACSC) hospitalization rates by current waitlist status were quantified from physician claims and hospitalization data. Relative differences during COVID-19 first (Q2 2020; April-June 2020) and second waves (Q4 2020; October-December 2020) were compared with the previous year.

RESULTS

During the study period, 100,867 primary care-eligible Nova Scotians (10.1%) were on the waitlist. Those on the waitlist had higher ED utilization and ACSC hospitalizations. ED utilization was higher overall for individuals ≥65 years and females; lowest during the first two COVID-19 waves; and differed more by waitlist status for those <65 years and for males. ED contacts and ACSC hospitalizations decreased during COVID-19 relative to the previous year, and for ED utilization, this difference was more pronounced for those on the waitlist.

CONCLUSION

Nova Scotians seeking primary care attachment utilize hospital-based services more frequently than those not on the waitlist. Both groups had lower utilization during the COVID-19 pandemic than the year before. The degree to which forgone services produces downstream health burden remains to be seen.

51 - Engagement of people with lived experience in a research project on dementia and COVID-19: lessons learned and contributions

Presenter: Laura Rojas-Rozo

THEME: Patient and Public Engagement

BACKGROUND AND OBJECTIVES

Patient engagement strategies can ensure meaningful inclusion of persons with lived experience in research project and can be implemented in studies involving people living with dementia (PLWD) and care partners. Our objective is to describe the process of the involvement of PLWD and care partners in our research project; specifically, the aim is to describe their contribution our research approach, research questions, and creation of data collection tools.

APPROACH

This is a reflective case study from our mixed methods research project in which we sought to understand the impact of the COVID-19 pandemic for PLWD and care partners, as well as their experiences in using health and social care services. We will carry out semi-structured individual interviews with our research partners (i.e., PLWD, care partners, and academic researchers) to understand their experiences during this endeavor. A thematic analysis of these interviews will be conducted. We will describe the process of the engagement of persons with lived experience and how their collaboration shaped our research protocol, data collection tools (e.g., interview guides) and other research materials.

RESULTS

Persons with lived experience have influenced the research project by 1) modifying overall research question and sub-questions; 2) co-generating a framework for our research project based on their experiences; 3) implementing the use of the World Health Organization human-rights framework for PLWD for data analyses, 4) co-developing the qualitative data collection tools (interview guides), and 5) co-developing recruitment materials for the qualitative portion of our study. For the rest of the project, they will also collaborate with the following activities: recruitment of participants, results interpretation, and organization of and participation in a deliberative dialogue for providing policy recommendations. A list of recommendations on engagement of persons with lived experience in research will be generated.

CONCLUSION

This study demonstrates how collaboration with people with lived experience in dementia are possible and have a positive impact in research development, conception, and outcomes. In addition, this work will inform and guide future research projects aiming to engage persons with lived experience in dementia in a meaningful way.

52 - Engaging patients in paediatric mental health research: A systematic review

Presenter: Erin McCabe

THEME: Patient and Public Engagement

BACKGROUND AND OBJECTIVES

Patient engagement (PE) in paediatric mental health (MH) research is critical to focus research conception and design on policy and clinical issues most relevant to patients. However, there is limited evidence to guide MH researchers on PE approaches that foster a positive research engagement experience for patients. This systematic review will aim to describe the experiences of patients and researchers using various engagement strategies for PE in MH research.

APPROACH

The following databases will be searched: MEDLINE, EMBASE, CINAHL, and PsycINFO, from 1990 to present, using a combination of subject headings, keywords, and synonyms for the concepts "patient engagement", "paediatric" and "mental health". Articles that describe engaging children or youth in MH research will be included, any methodology or research design. Two independent reviewers will do study selection and quality appraisal. We will extract study characteristics, including stage(s) of research where patients were involved, the strategies used to engage patients, and barriers/facilitators to PE described. Studies will be stratified based on degree of PE using CIHR's Strategy for Patient-Oriented Research Framework.

RESULTS

The review is in progress and results will be presented at the CAHSPR 2022 conference. A preliminary search with high specificity revealed 31 potentially relevant studies. We expect to find varying degrees of engagement in the research process. We will identify specific strategies that optimize the experiences of PE in MH research. If sufficient literature is available, we hope to examine the relationships between the degree of engagement and the patient's experience of PE in MH research.

CONCLUSION

This study will provide an understanding of the PE strategies that can enhance the experience of children and youth engaged in MH research. Researchers may use these findings to inform their PE approaches in pediatric MH research, which will improve the relevance and impact of the research they produce.

53 - Evaluating the Impact of Policies and Mapping a Way Forward for Health Professional Learners in a Pandemic

Presenter: Kelly H

THEME: COVID-19

BACKGROUND AND OBJECTIVES

The COVID-19 pandemic has created unprecedented health, economic, and social challenges for countries around the world. With community health and safety at the forefront of decision-making, most U-15 universities and practice partners in Canada suspended or re-structured clinical practice. This generated questions about how to include health professional students safely in skills-based learning to ensure that they meet program learning objectives, support pandemic response efforts, and potentially offer skilled support to the overstretched healthcare workforce.

APPROACH

A rapid review conducted to address the following objectives:

1. Inventory volunteer and paid pandemic response activities involving students - document review and survey of students and 2020 graduates of prelicensure programs in the Faculties of Medicine and Health, Dalhousie University.
2. Identify barriers/risks to mobilizing students in response activities - interviews and/or focus groups to explore student, faculty, and health authority manager/administrator perspectives/experiences.
3. Create new/adapt existing policies/strategies to overcome identified barriers/risks; create clear structures and processes to support decisions about student clinical placements amidst a pandemic - Stakeholder forum to review findings and develop/revise principles, strategies, and structures/processes.

RESULTS

Thirteen health education programs, representing approximately 1751 students, completed the document inventory of changes to skills-based learning. Within one month of the onset of the pandemic, skills-based learning was amended (suspended, transitioned to online platform); reintroduction was a lengthier process, taking approximately 11 months.
Ninety-six students, across a range of programs, responded to the survey. Despite 76% reporting pre-Covid online learning, 38.5% somewhat-strongly disagreed that it effectively replaced face-to-face learning, 43.8% believed that learning was negatively affected, and 44.8% had concerns of future performance.
Student and educator interviews (n=5) and focus group (n=1) data revealed the impact that disruptions in learning had, specifically on the ability to practice skills in person. Several innovative approaches to support student learning and faculty teaching were shared.

CONCLUSION

This rapid review provided insight into student and faculty experiences during the onset and throughout subsequent waves of the pandemic. Several innovations made by the Faculties of Health and Medicine may be sustainable. A stakeholder forum is planned for late March 2022, where findings will be shared and recommendations co-developed.

54 - Evidence-Informed, Community-Engaged Research Funding Design: Advancing Transformative Integrated Care and Impact

Presenter: Nida Shahid

THEME: Collaborative Healthcare Improvement Partnerships

BACKGROUND AND OBJECTIVES

Evidence-informed system transformation towards better integrated care can orient our health systems and policies towards achieving the Quadruple Aim and health equity. This study describes from the perspective of a federal health research funding agency, the process and outcomes of an evidence-informed, community-engaged approach to designing a large-scale research funding initiative Transforming Health with Integrated Care (THINC) to address challenges with implementation, evaluation, and scale of evidence-informed integrated care policies and interventions.

APPROACH

We aimed to meaningfully engage with patients, providers, researchers, and decision-makers from the health services and policy research community. Participants were identified from literature, Institute’s network, and participant referrals. Retrospective analysis of relevant CIHR-funded research, an environmental scan (2011-2021), and series of engagements were conducted (June - November 2021): semi-structured interviews (n=14), a workshop at the 1st North American Conference on Integrated Care (n=109), partnership discussions (n= ~20) and three focus groups (n=~8-10 participants per group) among prioritized population groups. Descriptive (quantitative) and thematic (qualitative) analyses identified themes essential for successfully integrated care, research investment priorities, and funding design elements.

RESULTS

Findings suggest elements essential to integrating care and a need for improved understanding of implementation and adapting promising interventions and policies for equitable uptake across diverse contexts. Participant engagements identified a common interest in prioritizing research on scaling existing models of integrated care and assessing the impact of integration. Patients identified need for patient-led research and meaningful engagement; providers expressed the need for improving access, data infrastructure and team-based care models; and rural and remote communities identified distinct priorities, needs and challenges. Common themes included the need for community-based and led solutions, importance of meaningful engagement among researchers, practitioners, decision-makers and patients/communities, and research strategies such as knowledge mobilization, embedded research and implementation science to amplify the potential relevance and impact of the research.

CONCLUSION

A promising strategy to achieve the Quadruple Aim and health equity, transformative integrated care remains a priority for patients, providers, researchers, decision-makers, and research funders. This study demonstrates future research investments are needed for equitable spread/scale of integrated interventions and policies with the greatest potential for transformative integrated care impact.

55 - Examining the Mental Health Experiences of Medical Students during the COVID-19 Pandemic, with a Focus on the Influence of Gender and Race: A Sub-study of the Healthy Professional Worker Partnership

Presenter: Nour Elmestekawy

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Medical school can be a time of significant stress. There is evidence that medical training can negatively impact students' mental health, but how the COVID-19 pandemic has affected medical students is unknown. Because different and intersecting identities play a role in the experiences of medical students, the literature points to the need for an exploration of the influence of gender and race on the experience of mental health issues, and leave-taking, during medical training.

APPROACH

This study is part of the Healthy Professional Worker (HPW) project: a mixed-methods study of the experiences of mental health, leaves of absence, and return to work amongst professional workers. Canadian medical students were recruited through email, posters, discussion forums, and social media advertisements. Interviews with 8 medical students were conducted via zoom and telephone using a semi-structured interview guide adapted from the original HPW interview guide. Interviews were transcribed verbatim and coded in NVivo. The data were analyzed using an intersectional and comparative lens with an explicit focus on gender and race. Approval from the uOttawa REB was granted.

RESULTS

Workload-related burnout is endemic and for some pre-dates medical school considering the highly competitive nature of admissions. Gender and race influence students' experiences of medical school and these are poorly recognized. Racialized students, for example, feel a lack of inclusivity not seeing themselves in the curricula which impact their sense of belonging. The pandemic has exacerbated these but also created additional stressors for medical students. There is confusion about scheduling of course and practica. Lack of access to job shadowing has created stress related to specialty selection. Whereas flexibility has been garnered for COVID-positive students, these forms of flexibility may not have been extended to those with gender-related circumstances. Students are generally aware of the resources available, though these vary by school.

CONCLUSION

This study can help inform the development of responsive interventions to improve the mental health of all students throughout the training process. Specific attention will be devoted to interventions relevant to the pandemic, as well as interventions that address challenges that medical students are experiencing related to gender and race.

56 - Experience of managers in long-term care facilities during the COVID-19 pandemic

Presenter: Carole Estabrooks

THEME: COVID-19

BACKGROUND AND OBJECTIVES

Retention of managers in long-term care (LTC) was a well-known problem prior to the COVID-19 crisis. While reports of continuing pandemic challenges in LTC proliferate, the impact on the personal and professional lives of managers remains largely unknown. This study explored the unique experience of LTC managers during the pandemic and sought their advice to decision-makers. Here we report the major themes that emerged from our qualitative analysis and discuss broad implications of these findings.

APPROACH

This study was nested within a larger mixed-methods investigation of the impact of COVID-19 on LTC staff and residents conducted by the Translating Research in Elder Care (TREC) research program. For this interpretive descriptive study, twenty-one managers were recruited from eight purposively selected nursing homes across two Western Canadian provinces. Facilities varied by size (under or over 120 beds), ownership model (for profit/not for profit), and extent and severity of COVID-19 infection. Semi-structured, virtual interviews were conducted between January and April 2021. Data collection and inductive content analysis occurred concurrently. A follow-up on-line survey was completed in early 2022.

RESULTS

COVID-19 has had a profound impact on LTC managers both personally and professionally. Four major themes emerged from our analysis: (1) Responsibility to protect: Managers assumed responsibility for the protection of residents, staff, and their own families, and experienced distress when COVID-19 infiltrated their units. (2) Overwhelming workloads: Participants described rapidly changing policies amid severe staffing shortages. (3) Mental and emotional toll: Managers reported symptoms of anxiety, depression, and insomnia. Many continue to struggle with the effects of visitor restrictions on residents and families. (4) Moving Forward: The increased workload and stress of the pandemic has led some managers to consider leaving the profession entirely. Early findings from the follow-up survey confirm the qualitative findings and add additional insights.

CONCLUSION

Mental distress and excess workload during the pandemic increased the risk of burnout in managers, which must be addressed to prevent higher attrition. This also points to an urgent call for systemic change to improve staff working conditions for managers and thus the quality of care and life for residents.

57 - Exploring system resiliency within the North York Toronto Health Partners North York Community Access to Resources Enabling Support Program – A pragmatic case study

Presenter: Kimia Sedig

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Ontario Health Teams (OHTs) were implemented in 2019 as a Canadian model of health system organization meant to improve integration of care across Ontario. According to a broad spectrum of literature, health system integration and health system resilience (HSR) are closely intertwined. Under the umbrella of the North York Toronto Health Partners (NYTHP) OHT, the program North York CARES (NYCARES) was developed to support patients with complex care needs transitioning from the hospital to the home. NYCARES provides core services in a collaboration between VHA Home Healthcare, North York General Hospital and NYTHP. The purpose of this study was to use NYTHP (with specific focus on NYCARES) as a case study of the OHT model's integrative characteristics in practice, and its ability to respond to large scale crises, using the COVID-19 pandemic as a natural experiment.

APPROACH

We used a combination grounded theory, qualitative case study approach to explore the presence or absence of integration and resilience in the OHT model. The case's parameters were limited to the NYCARES program due to its explicit focus on integrating care and its initial implementation a few months prior to the pandemic's start. A combination of semi-structured interviews, non-participant observation, and document analysis was used to explore program partners' individual and collective experiences with the program's integrative characteristics, and how those experiences did or did not impact the program's response to COVID-19.

RESULTS

Results showed that the program's operation included key integrative characteristics: regularly facilitated virtual communication between and among partners; an open, trusting culture of collaboration; and clearly-defined program goals and values that were emergent from partners' willing consultation. These characteristics allowed for adaptability, innovation, and operational resilience in the face of the pandemic's strain on various sectors of the healthcare system. Participants described how, despite not being designed to address the burden of COVID, NYCARES shifted its focus to alleviate COVID-related strain imposed on hospitals, homecare, and long-term care through its strong sense of constructive cooperation, shared passion and patient-centric vision, and a diverse network of multi-professional resources that allowed for effortless flexibility and the ability for partners to easily "think on their feet". However, the program's apparent resilience also remained limited by the fragmented macro systems it existed within. Participants regularly noted that without their continued, yet tenuous provincial funding, they remained unsure of the program's longevity or scalability. Additionally, few participants felt truly connected to the OHT as a whole: its relevance to their work was entirely resource-based, and they did not feel ownership over their understanding of its vision.

CONCLUSION

NYCARES's experience throughout the COVID-19 pandemic has presented a clear case for a connection between integrated care and systemic resilience. However, lack of wider systemic support for such integrated programs limits their ability to flourish past their immediate contextual circumstances. Scalability and self-sustainability are both key principles of HSR, and better understanding of how to extend to the rest of the healthcare system the integrative principles that have enabled NYCARES's success to date is critical to achieving wider systemic resilience.

58 - Exploring the impacts of clinician-guided navigation vs. self-navigation for youth with mental health and/or addiction concerns and their families: A randomized controlled trial

Presenter: Andreina Da Silva

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Caregiving for an individual with mental health and/or addiction (MHA) concerns can be highly stressful due to difficulties accessing services. To improve access to the care system, system navigation is being widely implemented. Navigation is delivered by trained navigators; in contrast to an individual self-navigating by finding and accessing services for themselves.

This study examined whether families of youth with MHA concerns who receive clinician-guided navigation had improved clinical outcomes compared to families who self-navigate.

APPROACH

A total of 213 caregivers of youth (ages 13-26) experiencing MHA concerns participated in this randomized controlled trial. Participants were randomly assigned to the clinician-guided navigation condition (provided by the Family Navigation Project in Toronto), or the self-navigation condition, in which they received an online resource list. Clinical outcomes were assessed blindly through the Caregiver Strain Scale, Family Satisfaction Scale, and the Symptoms and Functioning Severity Scale. Participants' health service utilization was assessed, and using semi-structured qualitative interviews, their experience accessing mental health services was detailed. Participants completed measures at two different time points: baseline and 4 months.

RESULTS

Group differences between the clinician-guided navigation and self-navigation conditions on clinical outcomes including caregiver strain, family functioning and youth's functioning will be presented, as well as findings on participants' health service utilization. In addition to quantitative measures, we will be presenting themes that arose in our thematic analysis of qualitative interviews completed by participants in the clinician-guided navigation condition, to lend voice to participants' experiences accessing the MHA system as well as the role of clinician-guided navigation and self-navigation in these care experiences. Analysis will be complete in April, 2022 and findings available for the conference.

CONCLUSION

The findings will elucidate the impact of clinician-guided navigation vs. self-navigation on outcomes for youth and families' in the Canadian context. This work may provide important data to inform policy-makers on appropriate allocation of MHA system resources and the potential cost-benefit of guided navigation supports.

59 - Exploring the relationship between disengagement in early psychosis intervention services and area-level marginalization

Presenter: Rebecca Oliveira

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Keeping youth engaged in early psychosis intervention (EPI) services is a significant priority and challenge. Many studies have explored individual level factors that contribute to the risk of disengagement but have not focused on geographic and area level characteristics. This project explores the relationship between disengagement in EPI services and area-level marginalization. This kind of exploration can inform policy changes related to the location of EPI services and tailored outreach initiatives.

APPROACH

Using data from a prospective chart review of 225 CAMH EPI service patient records, a secondary analysis will be completed to investigate the association between disengagement and area-level marginalization using the Ontario Marginalization Index (ON-Marg). The ON-Marg consists of four dimensions: residential instability, material deprivation, dependency, and ethnic concentration. This association will be investigated using a Cox proportional hazards model, and will be mapped using Geographic Information Systems (GIS) to visualize patterns of disengagement at the area-level. A Local Indicators of Spatial Association (LISA) cluster map will also be created to further explore spatial patterns and identify their significance.

RESULTS

Results from the primary analysis showed that almost one-fifth of patients disengaged from EPI services prematurely. This primary analysis examined factors associated with premature disengagement in the first 9 months of EPI treatment and found no associations between individual level social determinants of health (SDH) and the risk of disengagement. Examining the association between area-level marginalization and disengagement has the potential to reveal environmental SDH that may predict the risk of disengagement. We hypothesize that residence in areas with higher marginalization indices (most marginalized) will be associated with an increased risk of disengagement from EPI services. We also hypothesize that the spatial analysis will reveal the presence of clustered events of disengagement, indicating that there is a spatial association.

CONCLUSION

Although this project used a small sample, it highlights the potential of this kind of analysis in revealing inequalities related to disengagement in EPI services at the area-level. Further research should consider studying a larger sample size, across multiple EPI sites, and include qualitative methods to gain a deeper understanding.

60 - Family Experiences Accessing Respite Care for Children with Medical Complexity in Nova Scotia

Presenter: Sydney Breneol

THEME: Health Policy, Healthcare Reform (includes priority setting, politics)

BACKGROUND AND OBJECTIVES

Respite care is an essential strategy to support caregivers of children with exceptional medical needs. However, many caregivers report difficulty accessing respite services that meet their individualized needs. Addressing this gap in care is urgently needed to effectively support these vulnerable children and their families. This project sought to better understand the experiences and needs of children with medical complexity and their families seeking respite care in Nova Scotia.

APPROACH

This project highlights a clinical-research partnership between a trainee, senior researcher, front-line clinician, and decision makers. This partnership was created to ensure study findings could produce relevant and evidence-informed practice and policy recommendations. We used a qualitative descriptive design to conduct semi-structured interviews with caregivers of children with medical complexity. Interviews were analyzed using direct content analysis to classify data into the Theoretical Domains Framework, followed by an inductive thematic analysis. All transcripts were coded independently with frequent check-ins with the clinical-research team to examine themes. Final coding was reviewed by a second coder.

RESULTS

We interviewed 11 caregivers (aged 28-65 years old) of children with medical complexity (aged <1 to 22 years). Respite care was described as a break for caregivers and a means to create positive experiences for the child outside the family unit. Caregivers expressed appreciation and relief for respite care delivered by a trusted worker, often using this time to sleep and address personal and family needs. Respite was described as essential for family functioning. Barriers to accessing respite care were identified, such as restrictive eligibility criteria to receive funding, difficulty locating skilled providers, and gaps in care coordination and communication. Caregivers also highlighted the need to increase capacity for pediatric-specific respite services.

CONCLUSION

Urgent action is needed to improve the state of pediatric respite for children with medical complexity and their families. These findings build upon our previous scans of respite care programming and provide pragmatic recommendations for designing family-centered respite care services for children with medical complexity and their families.

61 - First Nations Adult Populations in Canada: Cultural Mechanisms and Impacts on Health & Wellbeing

Presenter: Jocelyn Paul

THEME: Indigenous Health

BACKGROUND AND OBJECTIVES

Current health inequities amongst Indigenous peoples are frequently attributed to various historical and ongoing effects of colonization. While some evidence suggests that certain aspects of Indigenous cultural identity buffer against poor health outcomes that are worsened through experiencing social stress, inconsistent evidence and minimal research in this regard has explored these links among First Nations peoples living on-reserve in Canada.

APPROACH

That said, we decided to perform secondary analyses to delineate what the social stressors are at the national-level that impact levels of psychological distress among First Nations living-on reserve and in northern communities; to and delineate the cultural mechanisms that directly influence levels of psychological distress and in turn, also/or protect against the negative impacts of particular social stressors on psychological distress. Secondary analyses were performed using the First Nations Regional Health Survey 2015/16 among First Nations adults living on-reserve or in northern communities in Canada.

RESULTS

Among the adult sample (aged 18+ years old) experiences of physical aggression, verbal aggression, and cyber-bullying were linked to increased psychological distress. Strong feelings of community belonging were linked to reduced psychological distress, and buffered against higher psychological distress levels among those who were bullied. Participation in community events was not linked to psychological distress, but was associated with reduced psychological distress among those who reported experiencing physical and verbal aggression.

CONCLUSION

The results highlight the influence of social stressors in the lives of First Nations peoples, and the potential protective effects of particular aspects of cultural identity within First Nations communities. It is hoped that this project will inform the need for more culturally based health interventions and social policies.

62 - Gender wage gaps in the health and education workforces across the urban–rural continuum: a decomposition analysis using linked population and geospatial data

Presenter: Neeru Gupta

THEME: Health Human Resources

BACKGROUND AND OBJECTIVES

The education pipeline impacts opportunities for enhanced diversity in health practitioner candidates and, in turn, health workforce equity and performance. Some studies have examined gender and urban/rural imbalances in the health and education workforces, such as occupational segregation and wage gaps, to inform policy options. Yet, there is a dearth of evidence on how labour market opportunities and remuneration structures may affect women and men health and education professionals differently across the urban–rural continuum.

APPROACH

Using data from the 2006 and 2016 Canadian population censuses, we applied linear regression and Oaxaca-Blinder decomposition analyses to assess trends and differentials in annual log employment income by sex (male/female), traditional labour market measures (age, educational attainment, class of worker, adult migrant status), socially institutionalized gender roles (household head, childcare), and social identity factors intersecting with gender (visible minority status, Indigenous identity) among full-time health and education professionals aged 25-54. We further linked the census data to the Index of Remoteness, a continuous measure capturing dimensions of remoteness and accessibility for all communities.

RESULTS

The health and education workforces were characterized by gendered occupational segregation: 90% and 60% female among nursing professionals and secondary school teachers, respectively, compared to 45% among both specialist physicians and university professors. Female-dominated professions were simultaneously characterized with geographic distributions most closely approaching the general population: while 11% of nurses and of secondary school teachers resided in the 60% most rural and remote areas of the country (echoing the general population), only 5–6% of physicians and postsecondary educators resided in similarly characterized areas. Significant gender wage differentials were seen across all professions under observation, after adjusting for other factors. Residential remoteness was found to explain little of the gender wage gap; 35–64% of the wage differential remained unexplained, possibly due to (unobserved) discriminatory effects.

CONCLUSION

Findings from this decomposition analysis using linked population-based and geospatial data suggest that policy efforts to tackle female–male wage gaps among health and education professionals need to address occupational segregation and gender discrimination, despite equivalent skill levels and skill specializations for the tasks and duties of jobs, beyond spatial considerations.

63 - “Giving pain a home”: Co-designing new health services to prevent chronic pain after surgery in youth

Presenter: Kathryn Birnie

THEME: Collaborative Healthcare Improvement Partnerships

BACKGROUND AND OBJECTIVES

Preventing the development of pediatric chronic pain is a top priority identified by youth, families, healthcare professionals, and policymakers in Canada. Approximately 20% of youth who undergo major surgery will develop chronic pain that negatively impacts their quality of life. “Transitional Pain Services” (TPS) have emerged in adult tertiary care as an innovative and effective health service model to prevent chronic postsurgical pain, but evidence guiding models of care for pediatric populations is lacking.

APPROACH

Our team co-designed TPS for pediatric populations with youth with chronic postsurgical pain, parents, healthcare professionals, and health system administrators. Using human-centered design, we: (1) surveyed 85 multidisciplinary healthcare professionals from 20 healthcare institutions about current pain management practices for youth undergoing surgery; (2) interviewed 7 youth with chronic postsurgical pain, 7 parents, and 6 pain and surgical healthcare professionals about their experiences; and (3) conducted two virtual design thinking sessions with 5 youth, 7 parents, 9 healthcare professionals, and 6 administrators who co-developed a blueprint for pediatric TPS.

RESULTS

The survey of healthcare professionals identified significant gaps between current pediatric pre- and post-surgical pain management and recommended practices. Participants ‘somewhat agreed’ their institutions were committed and capable of change in pediatric surgical pain care. Tertiary/quaternary children’s hospitals reported less alignment with recommended practices than other institutions (community/regional or rehabilitation hospitals, community treatment centers). Interviews with youth, parents, and healthcare professionals emphasized the negative impact of poorly managed postsurgical pain, and shared unmet needs related to pain education, psychosocial support, resources for multimodal pain management, communication between healthcare professionals and families, and care coordination. Co-design workshops identified design principles for the new health service of: giving pain a home, considering the whole person, empowering youth and families, and addressing pain across the continuum of care.

CONCLUSION

Findings revealed a need for a new pediatric TPS to prevent chronic postsurgical pain in youth and moderate health system readiness to adopt it. Co-design methods offered a rigorous patient-centered way for meaningful innovation to address a top priority within the health system.

64 - “Home care that we could be proud of”: engaging experts-by-experience in the development of the Long-Term Life Care at Home model

Presenter: Valentina Cardozo

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

Canadians want to live, age, and receive care at home and the COVID-19 pandemic has exacerbated the need to expand long-term care system capacity to include home-based alternatives. Older adults, caregivers and community-based health and social care providers have essential knowledge, experience, and expertise to inform new models of care; yet are often underrepresented in research. We aimed to authentically engage these ‘experts-by-experience’ in the development of a new Long-term Life Care at Home model.

APPROACH

Six online focus groups were conducted with older adults, caregivers and health and social care providers across Ontario (n=67). Focus groups centred on patient vignettes and preliminary care packages developed through extensive quantitative analysis of routinely collected interRAI home care assessment data (n= 205,000) and an e-delphi survey of community providers (n=45). Each two-hour session homed in on one patient vignette, using an empathy mapping exercise to identify essential and missing care package components and discuss implementation challenges and opportunities. Focus groups were recorded and transcribed verbatim. Qualitative framework analysis guided the identification of key themes.

RESULTS

Focus group participants were mostly female (84%), Caucasian (73%), and ranged in age from 21 to 90 years. Sixty percent of participants identified as older adults, 49% as caregivers and 16% as health and social care providers. Findings include a framework of themes to inform the refinement of the Long-Term Life Care at Home model across three categories: 1) Validation of care package components, including support for key design principles such as ‘caring for the patient and caregiver as a dyad’; 2) System, organization and individual level barriers (e.g., ageism and family dynamics) and facilitators (e.g., technology to support communication); and 3) Changes to care packages, with an emphasis on optimizing the number of providers in the home and screening caregiver preferences and needs.

CONCLUSION

Inclusion of older adult, caregiver and health and social care providers as experts-by-experience in the development of new models of care is critical to ensuring post-pandemic solutions like the Long-Term Life Care at Home model are acceptable to system users and respond to the needs and preferences of aging Canadians.

65 - How Canadians rate their digital health literacy: An analysis from the 2021 Canadian Digital Health survey

Presenter: Waldo Beauséjour

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

With the digitalization of health care delivery accelerated by the COVID-19 pandemic, Canadian patients are mandated to be digitally literate in order to get the most out of digital health services. Concurrently, it has been reported that Canadians are more likely to seek out care virtually beyond the pandemic. We sought to assess the digital health literacy of Canadians and uncover how this literacy is distributed across several sociodemographic and socioeconomic subpopulations.

APPROACH

We utilized data from the 2021 Canadian Digital Health survey conducted on a representative sample of 12,052 Canadians. This cross-sectional survey collects data on the utilization of digital health technologies by patients to access care. Besides, the online survey questionnaire utilized the self-reported eHealth Literacy Scale (eHEALS) to assess respondents' digital health literacy. We relied on descriptive statistics such as mean, standard deviation, and proportions to study the distribution of digital health literacy across sociodemographic and socioeconomic subpopulations. To ensure representativeness of the general Canadian population, post-survey demographic weights calculated from the 2016 census were applied to the survey results.

RESULTS

In 2021, the national average eHEALS score was 28 (SD=6.6), up from 27 (SD=6.2) in 2020. The 2021 results showed some variability across several sociodemographic subpopulations: (1) Canadians living in rural/remote communities reported lower eHEALS scores than their urban center neighbours; (2) eHEALS scores were lower among older adults (65+) relative to other age groups; (3) lower education level was associated with lower eHEALS scores. Some variability was also found across some health-related factors: (1) patients with access to a family doctor reported higher eHEALS scores than those without one; (2) higher eHEALS scores were associated with experience of using virtual care services. Besides, Canadians belonging to households with an annual income less than $50,000 reported lower digital health literacy compared to higher income groups.

CONCLUSION

Digital health literacy plays a crucial role in reducing digital health inequalities. It would be irrational to expand digital health services without equipping marginalized and racialized communities with the skills and knowledge needed to use these services. Massive digital health literacy campaigns bolstered by strong policies should be undertaken.

66 - How Do Professional Associations Influence Health System Change? Exploring Global and Local Literature

Presenter: Alyssa Indar

THEME: Health Policy, Healthcare Reform (includes priority setting, politics)

BACKGROUND AND OBJECTIVES

Health care in Ontario is being transformed through the development of Ontario Health Teams. These collaborative health systems are changing care delivery so that patients receive better integrated care in their communities. Professional associations are key stakeholders, representative of different health care professionals, with complex interests that affect their involvement and influence in system transformation. This literature review explored peer-reviewed and grey literature to understand mechanisms used by professional associations to influence health system change.

APPROACH

In the first stage of the literature review, expert librarians executed a focused search for international peer-reviewed literature relevant to the mechanisms used by medical professional associations to influence health system transformation. A focused search of select databases and handsearching (via Citation Gecko) yielded 14 articles.
The second stage of the review explores the mechanisms used by seven selected provincial professional associations (e.g., Ontario Medical Association, Ontario Hospital Association) to influence the develop of OHTs. This entailed reviewing publicly available organizational documents (e.g., position statements) and 200+ media articles from February 2019 onward.

RESULTS

Preliminary findings from the first stage of the review suggest that professional associations are sophisticated groups, often with the capacity to engage a variety of stakeholder groups and influence health policy development. The primary mechanisms that were identified to exert influence on health system transformation include leveraging political power, engaging in advocacy, and to a lesser extent, taking part in scholarly activities.
Early findings from the Ontario-specific grey literature review indicate that professional associations may use informal publications, such as position statements, to make their members' interests clear amid the dynamic process of OHT development. Professional associations may use the media to tailor their message to their intended audience (e.g., the public) but only occasionally strategically align with stakeholders with similar interests.

CONCLUSION

Limited research has examined how professional health care associations influence health care system change. This review identified multiple mechanisms used by these associations to influence health system transformation. Better identification of areas of congruence (e.g., shared functions or interests) could enhance collaboration and more effectively advance their respective interests.

67 - Identification of major cognitive disorders in self-reported versus administrative health data: a cohort study in Quebec

Presenter: Isabelle Dufour

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

Major neurocognitive disorder (MNCD) has risen as a priority for public health research. Various data sources, including administrative health databases and population-based surveys, are used to identify older individuals living with MNCD. Potential disparities between these sources are not documented but could help identify specific challenges in this population, as well as methodological shortfalls.

Objective. To describe the characteristics of older adults living with MNCD, identified in self-reported versus administrative health data.

APPROACH

Retrospective cohort study using the Care Trajectories -Enriched Data (TorSaDE) cohort, combining 1) five waves of the Canadian Community Health Survey (CCHS; 2007-2016) and 2) administrative health data from the provincial health-insurance board (1996-2016).

We included individuals from Quebec (Canada) who: 1) participated in at least one CCHS cycle; 2) were living in the community and at least 65 years old at the time of the CCHS completion. The study sample was divided into four groups according to self-reported MNCD (Yes/No), and MNCD identified in administrative health data (Yes/No). We compiled groups characteristics and compared them using ANOVA and chi-square test.

RESULTS

The study cohort was composed of 25,125 older adults, of which 784 (3.12%) had MNCD (identified in the CCHS and/or administrative health data). There is discordance for 551 individuals (70.3%). Only about 34% of individuals with an MNCD identified in the administrative health data self-reported the condition.

Our four groups present specific challenges related to the importance of perception, the access to a timely diagnosis in the community, the role of anosognosia, the caregivers' roles in reporting health information. Our results also highlight limitations of both data sources to conduct research on individuals presenting with cognitive impairment.

CONCLUSION

To a certain degree, both data sources fail to consider subgroups experiencing issues related to MNCD; studies like ours provide insight to understand their characteristics and needs better.

68 - Identifying older adult mental health considerations and objective differences since the onset of the COVID-19 pandemic: A mixed methods study

Presenter: Elizabeth Kalles

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Preliminary research suggests that the mental health of older adults has been negatively affected by the ongoing pandemic. However, frequent use of small, non-representative research samples limits the generalizability of findings to the diverse population of aging Canadians. The objective of this research is to explore pandemic-related mental health considerations of older adults, caregivers, and health/social care providers and determine related differences in the mental health of older adults since the start of the pandemic.

APPROACH

This mixed-methods approach used early pandemic survey responses to inform analyses of routinely collected health assessment information in Ontario. A 2-continuum model was applied to conceptualize mental health and mental illness as two separate but inter-related continua. Secondary framework analysis was guided by both deductive coding using themes from literature on past pandemic/epidemic mental health and inductive coding of free-text responses. The considerations of older adults, caregivers, and health/social care providers (n=305) related to mental health care, support, and treatment were identified. Complementary interRAI Home Care assessment items were then quantitatively analyzed to identify differences in older adult mental health.

RESULTS

Three core principles influence experiences and outcomes along the 2-continuum model of mental health: 1) information – to decide what choices to make; 2) autonomy – the ability to make choices and to have them be respected; and 3) access – to services, resources, etc. that help realize a choice. Older adults also discussed the societal and system level factors that affect their well-being, and their concerns/priorities for mental health across the 2-continuum model. Experiences and outcomes along the 2-continuum model included social isolation, grief, and anxiety, which directly and indirectly mapped to several interRAI Home Care assessment items and were analyzed for effects across time. The results of this analysis will be explored, with consideration for how this research may be applied towards program and resource development.

CONCLUSION

This research provides insight into older adult, caregiver, and health/social care provider mental health considerations at the onset of the pandemic and identifies objective differences in older adult mental health. This can help guide program and policy development to better support the mental health needs of older adults in Canada.

69 - Identifying people experiencing homelessness in Canadian administrative health data using ICD-10-CA code Z59.0: information quality and descriptive trends

Presenter: Kinsey Beck

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

People experiencing homelessness have complex health needs exacerbated by poor access to care. Understanding how people experiencing homelessness interact with healthcare could help inform efforts to address the needs of this population. In 2018, coding for patients who are homeless on admission was mandated in acute care data via the International Classification of Diseases (ICD)-10-CA code Z59.0. Objectives were to (1) assess the uptake of Z59.0 in administrative health data and (2) report descriptive trends.

APPROACH

We measured the frequency and proportion of records with an ICD-10-CA code Z59.0 in National Ambulatory Care Reporting System (NACRS), Discharge Abstract Database (DAD) and Ontario Mental Health Reporting System (OMHRS) from 2017 to 2020. We also reviewed other known identifiers of homelessness in the databases, including residential status through pre- and post-admission living settings, and postal code (e.g., 'XX' and 'Z1Z1Z1'). Descriptive analysis was stratified by age, recorded sex or gender (male/female), and month.

RESULTS

In DAD and NACRS, Z59.0 was the predominant identifier, increasing substantially after mandated recording in 2018 (0.60% DAD, 1.23% NACRS; 2020). In OMHRS, residential status was primarily used to identify homelessness (10.3%; 2020). Despite ICD-10-CA coding remaining optional in OMHRS, use of Z59.0 increased after the mandate in DAD and NACRS (0.26%; 2020). Postal code identifiers were inconsequential in all databases. Recorded homelessness increased over time. Compared to non-homeless records, we observed a higher proportion of homelessness being recorded for males in younger age groups (ages 25-44). Discharge settings varied by province/territory, the most common settings being shelters, group homes and other supportive living settings. Among homeless records, over one third of ED visits and hospitalizations were mental health-related compared to <5% among non-homeless records.

CONCLUSION

Mandatory coding of homelessness using Z59.0 has resulted in increased data capture in DAD and NACRS. This enhanced collection of homelessness data provides an opportunity to explore the characteristics of this complex patient group and reasons for seeking care in acute care settings.

70 - Impact of COVID-19 on Burnout of Family Physicians in Canada: One Year Later

Presenter: Dragan Kljujic

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

A year after the pandemic outbreak, primary care providers continued to face aggravated psychological pressures. This study gauges the mental health and burnout levels of family physicians during the third wave of the COVID-19 pandemic in Canada. Assessed are the levels of personal, professional and patient related burnout of Canadian family physicians (FPs) in the response to the COVID-19 pandemic. Demographic and work-related factors that may influence FPs burnout levels are explored.

APPROACH

An online self-report survey was administered over four weeks in April-May, 2021. Personalized survey invitations were sent via email, with two reminders following initial contact. Most FPs in Canada are members of the College of Family Physicians of Canada (CFPC).39,991 FPs received survey invitations and3,409 replied, for an overall response rate of 9%. The study incorporated the Copenhagen Burnout Inventory (CBI) with 19 items that measure the level of personal, work-related, and patient-related burnout. Questions about FPs' overall sense of well-being/personal wellness asked in the first COVID-19 survey conducted one year prior were asked again to allow longitudinal comparison.

RESULTS

Overall, the rate of burnout among FPs was rising. While at the beginning of the pandemic, about 5% of FPs reported feeling burned out and thinking of, or have taken, a break from work, one year later this number tripled. More than one-fifth (22%) of FPs experienced high or severe personal and work-related (21%) burnout, while 13% reported the same levels of patient-related burnout. Female FPs reported significantly higher levels of high or severe personal burnout (26%, 17%) and work-related burnout (23%, 16%) than male FPs. Younger FPs experienced high or severe levels of personal burnout more often than older FPs. FPs in Alberta (26%), Ontario (24%) and BC (22%) experienced personal burnout more frequently than FPs in Manitoba (17%) and Quebec (17%).

CONCLUSION

Roughly one in four FPs in Canada experienced high or severe burnout. The numbers are climbing rapidly, reflecting serious challenges FPs are confronting due to the pandemic. It is essential to recognize the challenges they are facing and to build effective support systems to improve their mental health.

71 - Impact of the COVID-19 pandemic on healthcare service use by community-dwelling persons living with dementia in four Canadian provinces: A cohort study

Presenter: Laura MacLagan

THEME: COVID-19

BACKGROUND AND OBJECTIVES

Persons living with dementia (PLWD) are disproportionately affected by the COVID-19 pandemic in Canada, with a higher risk of severe illness and death than the general population. Their health and social service use is likely impacted both directly (infection) and indirectly, as their access to care and services has been disrupted. Our study aims to measure the impact of the pandemic on health and social service use of PLWD in four Canadian provinces.

APPROACH

Using administrative databases and a quasi-experimental design, we identified retrospective cohorts of PLWD living in the community on March 1, 2020 (pandemic) and March 3, 2019 (non-pandemic) in Ontario, with data forthcoming in Quebec, Saskatchewan, and Alberta, Canada. We measured rates of all-cause emergency department (ED) visits, hospitalizations, family physician visits, and mortality in three pandemic periods (first wave, March-May; plateau, June-August; second wave, September-December). We estimated rate ratios (RR) and 95% confidence intervals (95%CI) with a GEE negative binomial model comparing the pandemic periods to the corresponding periods during 2019.

RESULTS

There were 87,044 community dwelling PLWD in Ontario identified on March 1, 2019, and 89,412 on March 1, 2020. The demographics of each cohort were similar. All-cause ED visits were lower throughout 2020 compared to 2019. Hospitalizations were lower during the pandemic first wave (RR [95%CI]=0.78 [0.75, 0.81]) and the plateau (RR [95%CI]=0.92 [0.89, 0.95]), but were similar by the second wave (RR [95%CI]= 0.96 [0.93, 1.00]). Family physician visits were higher during the pandemic in the plateau (RR [95%CI]= 1.05 [1.03,1.06]) and the second wave (RR [95%CI]= 1.12 [1.10,1.14]). Mortality was higher in the first wave (RR [95%CI]= 1.13 [1.07, 1.20]) and the second wave (RR [95%CI]=1.13 [1.07, 1.19]). Results from the other provinces will be combined using a meta-analysis.

CONCLUSION

While we observed higher mortality during the pandemic compared to 2019 among PLWD, ED visits were lower and family physician visits were higher. When combined with the other provinces, these results will provide valuable evidence and insight to support appropriate service access during public health emergencies for PLWD.

72 - Impacts of the COVID-19 Pandemic on Opioid-Related Poisoning among First Nations in Ontario

Presenter: Sophie Kitchen

THEME: Indigenous Health

BACKGROUND AND OBJECTIVES

Opioid-related deaths have increased substantially during the COVID-19 pandemic. First Nations have been disproportionately impacted by opioid-related harms due to the intergenerational impacts of colonialism, the historical erosion of First Nations culture, and the ongoing barriers to accessing health care services. We conducted a body of research led by a Steering Committee of First Nations representatives and community members to better understand trends of opioid-related poisoning among First Nations in Ontario during the COVID-19 pandemic.

APPROACH

We examined trends and characteristics of opioid-related poisonings, including hospitalizations and deaths, among First Nations and non-First Nations in Ontario, Canada prior to and during the COVID-19 pandemic. Opioid-related hospitalizations were compared in a pre-pandemic (March 2019 to March 2020) and pandemic period (March 2020 to March 2021) using data from the Canadian Institute for Health Information. Opioid-related deaths were compared in a pre-pandemic (March to December 2019) and pandemic period (March to December 2020) using data from the Office of the Chief Coroner/ Ontario Forensic Pathology Services. First Nations individuals were identified using the Indian Registry System.

RESULTS

Opioid-related deaths increased 132% among First Nations during the pandemic (from 50 deaths between March-December 2019 to 116 deaths between March-December 2020) compared to a 68% increase among non-First Nations. The majority of First Nations who visited the hospital or died of an opioid-related poisoning were men and lived in urban areas or outside of First Nations communities. However, during the pandemic the largest relative increases in opioid-related harms occurred among First Nations living in rural areas and within First Nations communities. The role of fentanyl as a direct contributor to opioid-related deaths continued to increase during the pandemic and accounted for the majority of deaths, among both First Nations (72.0% to 87.1% of deaths; $p=0.02$) and non-First Nations (74.6% to 85.4% of deaths; $p<0.001$).

CONCLUSION

Our findings reinforce the urgent need to address the rise in opioid-related harms among First Nations people during the COVID-19 pandemic. The increasing involvement of fentanyl in Ontario’s unregulated drug supply further highlights the need for expansion of access to harm reduction services and reducing barriers to treatment access.

73 - Implementation of a living laboratory intervention in Family Medicine Groups to improve medication use for Quebec seniors with neurocognitive disorders

Presenter: Dylan Bonnan

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

In Quebec, many Family Medicine groups (FMGs) include pharmacists in multidisciplinary primary care teams, who perform medication reviews, adjustments, follow-ups and provide suggestions for medication optimization. Despite the Quebec Alzheimer Plan's recommendations, not all FMGs involve pharmacists in the clinical assessment of seniors with major neurocognitive disorders (NCD). Stakeholders and clinicians initiated this study to evaluate the impact of pharmacists' involvement on medication use and well-being of seniors with NCD.

APPROACH

This ongoing pragmatic controlled study evaluates a living laboratory-type intervention in two Quebec regions. Seniors undergoing cognitive assessment, recently diagnosed with major NCD or receiving care for this at home, are being identified and recruited in FMGs. FMGs implementing the intervention involve pharmacists in these patients' care trajectory. Training and regular mentoring are offered. In control FMGs, no FMG pharmacist is involved, and usual care is provided. Medication use (including appropriateness) and burden, satisfaction, and quality of life are assessed at study beginning and after six months of follow-up. The FMG teams' experiences with the intervention will also be assessed.

RESULTS

Despite COVID-19 related challenges, including changes and resulting uncertainties for patients, training and patient recruitment tools were developed and tested with clinicians and patient collaborators. The intervention is currently being implemented in seven FMGs despite staff shortages caused by the pandemic. To date, 29 patients have been approached, 19 have agreed to participate and completed the first questionnaires. The living lab's flexibility has allowed us to iteratively adapt the implementation process and data collection methods, to accommodate the FMG teams' and patients' needs. This research will add new knowledge on the impact of pharmacists' involvement in FMGs and home care for seniors with NCD to address the "epidemic of polypharmacy in geriatrics".

CONCLUSION

The living lab concept and the clinicians' motivation has enabled the project's deployment despite pandemic-related challenges faced by FMGs and patients. Results will inform the processes required to successfully involve pharmacists and implement developed tools and procedures transposable to other care settings to improve patient care.

74 - Improving COVID-19 Vaccine Uptake in Saskatchewan, Canada: A Developmental Evaluation Approach

Presenter: Maryam Yasinian

THEME: COVID-19

BACKGROUND AND OBJECTIVES

The COVID-19 vaccine campaign strained health care systems with a massive immunization program that was complex in nature and unprecedented in pace and challenges. Our Developmental Evaluation of Saskatchewan's COVID-19 vaccination program was an early response to assess a complex emergent mass vaccination program to support learning and adaptation. The primary objective of our multi-disciplinary team of researcher-evaluators was to facilitate organizational learning among key stakeholders to improve decision-making and increase vaccine uptake.

APPROACH

In an ongoing collaboration with two COVID-19 vaccine program leaders, we commenced the Developmental Evaluation in February 2021. Aligned with the Developmental Evaluation approach, data collection was rooted in adjustment and flexibility to meet the evolving needs of the vaccine program. Data were primarily collected using meeting observations and program documentation. The observation team focused on documenting high-level issues and program challenges. As the vaccine program progressed, data collection was adjusted, and two surveys were conducted targeting COVID-19 vaccine recipients and vaccine immunizers. Data were analyzed iteratively in consultation with Saskatchewan Health Authority (SHA) stakeholders.

RESULTS

Nine feedback reports were generated over a nine-month evaluation period (February-October 2021). Seven meeting observation reports revealed the program issues, probable causes, and implications. Evolving issues ranged from vaccine shortage, delay, and supply fluctuation to interorganizational miscommunication, and vaccine hesitancy. Two reports were produced from survey findings to delve into the persistent issue of vaccine hesitancy. Survey results reported common prevalent themes in vaccine recipients' and immunizers' responses across demographics as well as some differences depending on respondents' demographic characteristics. A collective and cooperative leadership model between the two regulatory health services, Ministry of Health and the SHA, was not fully developed at the time of the vaccine program, which in turn limited the impact of our evaluation on advancing the vaccination policies and practices.

CONCLUSION

Our Developmental Evaluation provided stakeholders with reports of: (1) issues related to vaccine program development, probable causes, and implications; and (2) organizational challenges in relation to decision-making and effective collaboration in addressing those issues. Effective solutions to complex issues of Saskatchewan's COVID-19 immunization require a systems approach to collaborative decision-making.

75 - Improving system flow through timely access to Rehabilitation Outpatient Specialized Services (ROSS): a Quality Improvement project

Presenter: Sarah Donkers

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Saskatoon City Hospital provides outpatient services for individuals who require specialized interdisciplinary rehabilitation (e.g. neurological conditions). However, capacity and flow issues have led to long waitlists affecting access to these specialized services. This has driven a quality improvement (QI) initiative aimed to enhance timely access and systems flow to Rehabilitation Outpatient Specialized Services (ROSS). This abstract provides an overview of the process and proposed solutions and corresponding action items to date from this QI project.

APPROACH

An on-going iterative approach is being used, informed by the Model for Improvement Framework and Behaviour Change Wheel. An 'Advisory Group' was established, consisting of representatives from key stake-holder groups. Larger community engagement with key-stakeholders occurs bi-annually. As an initial step, the Advisory Group took a structured approach to fully explore the problem. The overarching aim and problem statements were generated. A fishbone diagram was created to facilitate identifying and reflecting on contributing factors. A driver diagram was used to group contributing factors into key change categories and brainstorm potential solutions. Outcomes, targets, and action-plans were created for prioritized solutions.

RESULTS

Flow from both acute neuroscience services and inpatient neurorehabilitation to ROSS were explored, along with factors affecting throughput of ROSS itself. Four primary drivers (and their prioritized change items) were identified: availability of ROSS (increase staffing, review of space, scheduling, cancellations/no-show rates); accessibility of ROSS (explore virtual/hybrid models, and travel/transport/parking barriers); waitlist management (update triaging priorities and create algorithms); communication and coordination across care-contexts (education, revised and electronic referral forms, ROSS intake coordinator to attend upstream team rounds/discharge planning). An environmental scan of similar services across Canada and a literature review (including best-practice recommendations) were conducted to further inform action plans, outcomes, and targets. A data sub-committee also created an electronic 'webform' to capture quantitative metrics (e.g. length of stay, wait-time) needed to capture change-over-time.

CONCLUSION

A structured approach and multi-stakeholder team were critical to clarifying the primary aim and conceptualizing all potential contributors and solutions, not just the obvious ones. Prioritized changes items will be implemented through a number of Plan-Do-Study-Act cycles, and project outcomes will continue to be evaluated over the next year.

76 - Incidence & Impact of Cost-Related Non-Adherence to Prescription Medications Among Racialized Canadians: A Rapid Review & Meta-Analysis

Presenter: Nikki Rousta

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

Cost-related non-adherence (CRNA) to prescription medications is associated with adverse health outcomes and increased healthcare utilization and expenditure. Marginalized groups, including those with lower income and lacking drug coverage plans have been found to be at increased risk of CRNA. The association between racialization and CRNA has not been studied in Canada. We investigated whether there are differences in access to prescription medications between racialized individuals and non-racialized people in Canada due to medication costs.

APPROACH

This is the first study to assess CRNA in Canada from an anti-racial equity lens, providing data on the incidence of CRNA among different racialized groups, analysed within our distinct Canadian political and social landscape. The importance of collecting race-based health data is gaining traction in recent years in order to identify inequities in access to healthcare, including prescription medications, as a first step in creating quantifiable, evidence-based solutions. Evidence of inequitable access to medicines among Indigenous people demonstrate a need to evaluate shortcomings within policy and provide further impetus for the development of a universal pharmacare plan in Canada.

RESULTS

Nine studies, including 63,065 participants, met inclusion criteria. The most frequently reported racial and ethnic groups were: white, Indigenous, and other. The overall incidence of CRNA among all study participants was 7.6%. The pooled proportion of CRNA was 6.9% for white people and 16.0% among Indigenous people. Compared with white people, Indigenous identity was more highly associated with CRNA to prescription medications (OR=2.06, 95% CI 1.76-2.40; $P < 0.0001$). Healthcare providers should be aware of the increased risk of CRNA among racialized Canadians and be prepared to initiate discussions about cost barriers as patients may be uncomfortable raising financial limitations. Policies that reduce costs for vulnerable groups, including subsidisation and reimbursement for essential medications, may be warranted.

CONCLUSION

Findings of this review suggest that there exist race-based disparities in access to prescription medications due to cost, despite programs such as the NIHB for Indigenous peoples. Additional high-quality data with complete racial and ethnic demographic information is needed to identify gaps in accessing prescription medications within Canada.

77 - INFORM BC: Idea to trial to application in a living laboratory

Presenter: Carole Estabrooks

THEME: Collaborative Healthcare Improvement Partnerships

BACKGROUND AND OBJECTIVES

Challenges to scale effective innovations are common across all sectors of Canadian healthcare. This large-scale implementation study is based on the successful pragmatic trial of INFORM (Improving Nursing Home Care Through Feedback On perfoRMance data). INFORM is based on goal setting and social interaction theories and supports long-term care (LTC) home managers to make sustained improvements. Here we will describe transforming the research intervention to a useable system innovation, critical ecosystem preparation, and partnership development.

APPROACH

This is a partnership among Translating Research in Elder Care, Michael Smith Health Research BC, and Healthcare Excellence Canada. We plan to implement INFORM in 300 LTC homes across British Columbia, beginning with implementation and comprehensive process evaluation of an initial cohort of 25 sites. The broader implementation process is premised on Diffusion of Innovation principles and principles from organizational learning. We plan to “loop our learning” in the spread and scale-up process, accelerating enrollment over 2023 and 2024. Our goal is to enable middle managers’ to better engage in successful change and improvement initiatives.

RESULTS

We will describe how complex (in this case quality improvement) interventions can be taken from idea – to proof of effectiveness – to scale in Canada’s LTC system. Early insights regarding engagement strategies, partnership challenges and successes, progress and disruptions, and the role of contextual factors in implementation will be shared. Preliminary process evaluation findings from the initial cohort will be discussed, as will be lessons learned.

CONCLUSION

Failure to scale promising innovations is a costly and widespread problem. We anticipate that this partnered effort will make an important contribution to implementation science and scaling activities, build capacity for sustained improvement in health and social care settings, and be of interest and utility to organizations interested in successful implementation.

78 - Innovations culturellement sécuritaires en soins primaires pour la gestion des maladies chroniques chez les Autochtones vivant en milieu urbain : Une étude de portée

Presenter: Marie-Eve Poitras

THEME: Indigenous Health

BACKGROUND AND OBJECTIVES

Les maladies chroniques sont un enjeu majeur dans la gestion de la santé et sont une raison importante d'utilisation des services de santé. Par contre, pour les populations autochtones vivant en milieu urbain, les expériences discriminatoires et la méfiance du système public freine le recours aux services de santé. La rareté de services publics culturellement sécuritaires nous a poussé à recenser la littérature afin d'identifier les innovations culturellement sécuritaires permettant la gestion des maladies chroniques.

APPROACH

Nous avons mené une étude de portée selon l'extension du modèle PRISMA pour les études de portée. Une recherche a été mené dans cinq bases de données (EBSCO, PsycArticles, SocINDEX, MEDLINE et PsycInfo). Nous avons mené une recherche de la littérature grise en utilisant le moteur de recherche Google. La sélection et l'extraction des données ont été réalisée par deux réviseurs indépendants et à l'aide d'une grille Excel coconstruite par l'équipe de recherche. Un total de 422 articles et 77 sites internet ont été identifiés. Un total de 19 articles et 5 sites internet ont été inclus dans l'analyse thématique.

RESULTS

La majorité des articles ont été publiés après 2013 et provenant de l'Australie ou la Nouvelle-Zélande. La majorité des innovations était des programmes et des interventions éducatives destinées aux patient(e)s, aux cliniciens ou aux deux. Les stratégies les plus fréquemment mises de l'avant étaient d'inclure la famille dans la gestion des soins, de former le personnel administratif et soignant sur la sécurisation culturelle, d'utiliser un vocabulaire ou des supports visuels accessibles et significatifs, d'inclure des repères artistiques et culturels dans la clinique, d'utiliser l'approche holistique et de se concentrer sur les priorités des patient(e)s. Les barrières à l'implantation de telles innovations les plus citées sont le manque de temps et de ressources financières et humaines.

CONCLUSION

Il existe plusieurs innovations permettant la gestion des maladies chroniques et leur implantation est documentée, pourtant peu de services sont actuellement offerts aux Autochtones dans le réseau public. Une réflexion doit être faite afin d'identifier les éléments décisionnels, politiques et économiques, entravant la mise en place de tels programmes.

79 - Insight into approvals, marketing, and pricing of new medicines in Canadian and international markets

Presenter: Blake Wladyka

THEME: Health Economics/Financing/Funding (including cost and economic analysis)

BACKGROUND AND OBJECTIVES

High-cost specialty medicines are increasingly dominating the landscape of new medicines launched in Canada and around the world. A growing share of these medicines, which include biologics, orphan drugs, and oncology products, have treatment costs in the tens or hundreds of thousands of dollars per year, although some have limited evidence of therapeutic benefit. This presentation provides an overview of new medicine characteristics, access, and pricing in Canada and within an international context.

APPROACH

This study explores the market entry dynamics of new medicines approved by Health Canada, the US FDA, and/or the EMA from 2015 to 2020. The analysis explores the availability, treatment cost, and sales of these medicines within one calendar year following the year of first international approval and monitors how these metrics compare year over year. Primary data for this analysis was sourced from IQVIA's MIDAS Database, with additional information from the Health Canada, US FDA, and EMA online drug databases. International markets examined include the Organisation for Economic Development and Cooperation (OECD) and the PMPRB comparator countries.

RESULTS

Between 2016 and 2020, an average of 46 new medicines received first-time approval in Canada, the US, and/or Europe annually. In each of the last three years, over half of the new medicines approved internationally had annual treatment costs in excess of ten thousand dollars, with a substantial share over $100,000. Approximately 37% of new approvals from 2015 to 2019 had been sold in Canada by the end of 2020, representing 85% of international new medicine sales, which places Canada ahead of the OECD median and in line with comparator markets for the number and relevance of new medicines sold. Furthermore, Canada had an approval rate of 40%–50% and sales for 22%–38% of new medicines within the year following their first international authorization.

CONCLUSION

The pace of new medicine approvals remains high across international markets, with numerous high-cost treatments gaining approval every year. While the five-year approval and marketing rates in Canada compare favourably with OECD median levels, they still lag behind a number of key markets including the US, Germany, and the UK.

80 - Intersectionality and Experiences of Adolescent Girls on Developing Sexuality and Self-Identity

Presenter: Neelam Punjani

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

Adolescence is a critical period in the transition from childhood into adulthood, during which young children aged 11-19 years' experience substantial physical, psychological, social, and emotional changes (Kuzma & Peters, 2016). Some of the most marked developments in adolescence are in sexual identity, the capacity for sexual intimacy, and reproductive potential. The integration of sexuality into personal identity and of sexual behaviour into interpersonal functioning requires parallel growth in emotional regulation, social skills, self-regard, self-knowledge, and health awareness. the association between developing sexuality and psychological well-being has not been adequately studied. An understanding of the potential relationship between developing sexuality and psychological well-being is essential to address the psychological aspect of sexual and reproductive health (SRH) issues among adolescent girls.

APPROACH

The interpretive description approach, a qualitative research design, was used to examine and interpret sexuality experiences of Pakistani-descent female adolescents The interpretive description approach provided a contextual understanding of the phenomenon, that is, adolescent sexuality understudy, allowing the researcher to critically analyze and interpret the existing empirical knowledge around sexuality and to look for practical solutions to apply the learned concepts and experiences in the practice settings. The study was conducted in Edmonton, Alberta, Canada. Ethical approval for the study was obtained from the Human Research Ethics Board of the University of Alberta.

RESULTS

The experiences of female adolescents highlighted the dangers of girls' sexuality and called attention to girls' moral responsibilities related to their sexual behaviour. Many of the participants remembered parents, schoolteachers, and peers conveying fear about the consequences of early sexual activity and others recalled being told to be "watchful" upon attaining puberty. Further, participants' stories also reflected an absence of sexual desire and pleasure elements when discussing sexuality. Participants stated that these issues were simply "not talked about." The silences that surround female bodies and sexuality are universal and cross-cut differences in culture, ethnicity, and religion. Participants explained how different roles are defined for girls than boys and girls' behaviour is highly controlled and monitored than boys. Girls are taught by their parents and society to be nurturing, obedient, and well-behaved. Pakistani female adolescents living in Canada are not often allowed to go out of the house on their own with friends or extracurricular activities. In many traditional families, girls are asked to stay at home to avoid any sexual misconduct and to prevent the family's image from any violation. Girls' behaviour is also strictly controlled than boys as it is argued, family honour is associated with a girl's behaviour

CONCLUSION

The adolescent girl's stories reflect the complexities of their sexualities and how they perceive and attribute meanings to their experiences. Additionally, these stories demonstrate the complex interaction of factors that influence adolescent girls' behaviours related to sexuality and sexual health. These stories demonstrate the need for cultural awareness while viewing each girl's experience in light of race, ethnicity, culture, and religion. This study has important implications for researchers, teachers, parents, and policymakers in a multicultural setting. Finally, it is hoped that the findings of this study will contribute to emerging views and understandings of immigrant adolescent girls' sexualities as contextualized within the complexities of their life experiences while offering tangible recommendations for improving the ability of adolescent girls to control their bodies and their lives.

81 - Interventions to improve nursing care of people with dementia in hospital: A mixed methods systematic review

Presenter: Elaine Moody

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Improving hospital care of people with dementia has become increasingly important. Hospitalization can be upsetting for people with dementia, and has been associated with negative outcomes such as increased mortality, longer length of stay, and increased likelihood of admission to nursing homes. Competent and compassionate nursing care is central to shaping the hospitalization experience for people with dementia, and there has been increasing interest in developing, implementing, and evaluating nursing interventions to improve their care.

APPROACH

We aimed to synthesize findings from quantitative, qualitative, and mixed methods studies that examined the effectiveness of, or experiences associated with, interventions to improve hospital nursing care of people with dementia. We conducted a mixed method systematic review, with a convergent segregated approach to synthesis, following JBI methodology. We searched 12 databases for published and unpublished research studies. Analysis involved separate qualitative and quantitative syntheses, followed by the integration of the literature through a process similar to thematic analysis.

RESULTS

Duplicates removed, there were 9928 studies retrieved for title/abstract and full-text screening by two or more reviewers. There were 31 studies included, 20 quantitative and 11 qualitative. Quality appraisal found few high-quality studies. Most were conducted in the US, Canada and the UK. Due to the heterogeneity of the studies, meta-analysis and meta-aggregation were not possible. Interventions included education sessions about dementia, introduction of nurses with advanced dementia training, and the use of technology to support person-centered care. Intervention outcomes that were measured included nurses' confidence and self-efficacy in providing dementia care, and patients' responsive behaviours and physiological health indicators. Analysis of the experiences of participating in interventions identified barriers and enablers to interventions and suggests system challenges to nursing practice.

CONCLUSION

Overall, there are few high-quality studies on the effectiveness of, and experiences with, nursing interventions to improve hospital care of people with dementia. The review highlights the need for system-level changes to enable a re-orientation of hospital nursing care to better meet the needs of people with dementia.

82 - Investigating Patient Experience with Integrated Virtual Care (IVC)

Presenter: Jonathan Fitzsimon

THEME: Primary Healthcare

BACKGROUND AND OBJECTIVES

Over 20 percent of the population of Renfrew County, Ontario has no access to primary care. The Integrated Virtual Care (IVC) project attaches patients to a named family physician who works predominantly remotely, supported by a local multidisciplinary primary care team. Patients receive comprehensive primary care through a blend of in-person, at-home, and virtual care options, depending on individual needs and preferences. The study aimed to evaluate patient experience of care delivered through IVC.

APPROACH

Anonymous satisfaction surveys were administered to 317 patients of the IVC project aged ≥ 18 years. The response rate of the survey was 40%, with n=121 patients completing the survey. The survey evaluated patient experience using the following subgroups: 1) Healthcare experience with your family physician; 2) Healthcare experience with the family health team; 3) Level of trust in your family physician. Simple and multivariate linear regression, ANOVA and post-hoc testing was conducted to assess and compare overall experience of IVC patients. Open-text responses were analyzed using nVivo software.

RESULTS

Overall, levels of satisfaction of primary care from the IVC project were high across all survey components. Of the 121 survey respondents in this study, 90% (n=109) reported that they were very satisfied or satisfied with their primary care from their IVC family physician. Moreover, patient satisfaction with care was not significantly influenced by having formed a previous relationship with their family physician. Interestingly, among the demographic variables captured by the study survey, only self-perceived health was positively correlated to patient satisfaction ($p<0.05$).

CONCLUSION

Study findings demonstrate that IVC has successfully met the first objective of the Quadruple Aim framework, Improving the Patient Experience, as patient satisfaction was high with all aspects of care through the IVC project. Future studies should seek to evaluate IVC’s impact on provider experience, and clinical and economic outcomes.

83 - Investigating the Impact of COVID-19 on Breastfeeding Rates and Support Structures during multiple pandemic waves at Michael Garron Hospital

Presenter: Desiree D'Souza

THEME: Maternal and Child Health

BACKGROUND AND OBJECTIVES

The Breastfeeding Clinic at Michael Garron Hospital plays a pivotal role in maintaining the hospital's "Breastfeeding Friendly" designation. The pandemic forced closure of the clinic from mid-March to mid-June 2020. The clinic re-opened with reduced capacity and appointment-only visits. Video lactation consultation was added. We assessed breastfeeding rates, and sought to identify the main challenges to breastfeeding in mothers who were confirmed or suspected cases of COVID-19 during different time points of the pandemic.

APPROACH

We used an explanatory sequential mixed-method approach. Breastfeeding rates from 2019 were compared to 2020 and 2021. New data from 2022 is currently being analysed. A retrospective telephone service evaluation of 12 mothers who tested positive for COVID-19 (86% response rate), and 60 who were under investigation (46% response rate) was conducted. A reflexive thematic analysis of qualitative data was conducted to identify the barriers and facilitators to breastfeeding during each pandemic wave.

RESULTS

Adjusted breastfeeding rates, which account for infants who received one feed other than human milk for a documented medical reason, were significantly lower for March, April, and May 2020 compared to 2019. In March and April 2020, 95% of mothers intended to breastfeed, and 91% were provided with breastfeeding education, yet the adjusted breastfeeding rate was 65%. The adjusted breastfeeding rate for 2021 remained significantly lower than 2019 although support structures such as video lactation consultation were added. The retrospective telephone survey identified anxiety about the virus, reduced lactation consultation, and isolation, as major barriers during the first wave, and reduced support from family as a major barrier during the second wave. Facilitators included video lactation consultation, and increased time with the baby.

CONCLUSION

Although support structures such as video lactation consultation have been added, the breastfeeding rate at Michael Garron Hospital remains significantly lower than before the pandemic. We will implement pilot programs that address barriers identified by patients to increase breastfeeding support for parents during any subsequent waves.

84 - Knee arthroscopy in Canada

Presenter: Alexey Dudevich

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Knee arthroscopy with debridement is commonly performed to treat osteoarthritis; however robust evidence does not demonstrate its benefit in older adults (≥60 years). Current Canadian guidelines advise against the procedure. We sought to understand the volume and variations in knee arthroscopy across Canada, and the characteristics of surgeons performing them.

APPROACH

Data were derived from the National Ambulatory Care Reporting System (NACRS), the Discharge Abstract Database (DAD) and the National Physician Database from 2011-12 to 2019-20. The study included all elective knee arthroscopies in all provinces excluding Quebec and 3 territories of Canada. Trends over time at national and provincial levels were analyzed using regression. Surgeons were classified by decade of graduation from medical school categorized as “high proportion inappropriate” or “low proportion inappropriate” based on their practices.

RESULTS

In 2019, 25% of arthroscopies were performed in patients ≥60 years. Between 2011 and 2019, arthroscopies decreased by 37% overall (from 42,785 in 2011-12 to 27,034 in 2019-20) and 39% in those ≥60 years (from 11,103 in 2011-12 to 6,772 in 2019-20). The age-standardized rates per 100,000 population decreased by 43% and 53%, respectively. The age-standardized rates per 100,000 varied widely between provinces ranging from 61 in British Columbia to 150 in Saskatchewan in 2019-20. There was a significant association between surgeons’ graduation year and their appropriateness category; 54% who graduated prior to 1990 were “high proportion inappropriate”, compared to 30.1% of surgeons who graduated in 2010 or later ($p<0.0001$). The estimated cost in 2019 of procedures in patients ≥60 was 12.4 million dollars.

CONCLUSION

Knee arthroscopy continues to be a common procedure in older patients despite the lack of benefit. Lower rates in some provinces suggest potential opportunities for improvement. Decreasing the use of this low value procedure may allow resources to be invested in higher value care for the population.

85 - L'impact du patient formateur sur l'intégration de l'approche patient partenaire des soins dans la pratique infirmière en Groupe de médecine de famille dans le cadre de la formation F2PL : Un protocole

Presenter: Anaëlle Morin

THEME: Collaborative Healthcare Improvement Partnerships

BACKGROUND AND OBJECTIVES

: En 2019, le ministère de la Santé et des Services sociaux du Québec a déployé un guide pratique pour les infirmières cliniciennes exerçant en Groupes de médecine de famille (GMF) pour soutenir entre autres l'appropriation des pratiques professionnelles et interprofessionnelles en rehaussant la qualité des services offerts en partenariat avec le patient. Pour faciliter cette appropriation, une intervention éducative de type train-the-trainer impliquant des patients formateurs et combinant la formation et le coaching clinique a été développée. L'objectif est de comprendre comment les patients formateurs contribuent à l'appropriation de l'approche patient partenaire des soins par les infirmières cliniciennes en GMF au Saguenay-Lac-Saint-Jean.

APPROACH

L'approche qualitative interprétative sera utilisée pour comprendre l'impact du patient formateur sur l'appropriation de l'approche patient partenaire par les infirmières cliniciennes. Des entrevues individuelles téléphoniques semi-dirigées seront menées afin d'explorer les changements de pratiques réalisés par 12 infirmières cliniciennes ainsi que d'identifier les barrières et les facilitants à l'adoption de cette nouvelle pratique. Des entrevues individuelles téléphoniques seront également menées avec 4 patients formateurs pour décrire le déroulement de l'intervention éducative et leur perception de ses effets. Une analyse thématique inductive et déductive sera réalisée et les thèmes émergents seront condensés pour émettre des propositions. Des cercles itératifs d'analyse et validation seront réalisés auprès de l'ensemble de l'équipe de recherche incluant des patients formateurs.

RESULTS

Les retombées positives, les facilitants et les barrières de la présence des patients formateurs seront identifiés dans le discours des infirmières cliniciennes. Les caractéristiques nécessaires pour un patient formateur efficace seront identifiées également. Les patients formateurs identifieront des barrières et facilitants à leur contribution lors de l'intervention.

CONCLUSION

Les propositions permettront de soutenir l'importance des patients formateurs dans la formation continue du personnel soignant. Elles permettront également d'identifier des avenues potentiellement efficaces de transmission des savoirs conduisant à l'approche patient partenaire et soutenant les professionnels à rehausser leur pratique. De plus, des bonifications pour les formations de type train-the-trainer existantes pourraient être envisagées. Enfin, des recommandations pour une meilleure inclusion des patients formateurs seront émises pour mieux répondre aux besoins cliniques.

86 - Look through the lens of newcomer family experience: A Canadian photovoice study

Presenter: Nahal Fakhari

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

Newcomer families encounter barriers in accessing critical programs for their children's healthy development, such as language, related costs and difficulty navigating systems. To fill a gap in knowledge on the experiences of newcomer families with young children, this research is to explore how families find and use early childhood programs and services in Nova Scotia.

APPROACH

This participatory action research used the photovoice methodology, shaped by feminist theory. With the support of our partners at a settlement agency, early childhood educators (ECEs) and newcomer families with young children were recruited to engage in a series of virtual workshops to discuss how newcomer families find and use programs for their children. Participants were involved in a focus-group-style conversation, took photos that reflected their experiences, and explained the significance of their pictures. The participants identified themes during the workshops to inform the results of the study.

RESULTS

Both ECEs and families discussed the systemic barriers that obstructed newcomer families' access to programs and services for their children. Financial challenges due to unemployment/underemployment, language, and cultural barriers were some issues highlighted. Despite these challenges, ECEs and families shared that culturally responsive programs that demonstrated appreciation of cultural/racial diversity enhanced access to programs and services. Finally, both groups discussed the critical role of social networks in supporting newcomers to find and use programs by helping families become aware of available programs and assistance with things like registration.

CONCLUSION

The result of this study suggests that newcomer families face systemic challenges in accessing services critical for their children's development. This research illustrated the lived experiences of families and identified opportunities to address inequity, improve early childhood programs and ensure families have access to supports.

87 - Mises à jour automatisées des messages SMS peropératoires : une initiative d'amélioration de la qualité des soins pour soulager les inquiétudes des proches

Presenter: Alexandre Mignault

THEME: Health Informatics

BACKGROUND AND OBJECTIVES

Une chirurgie est source d'anxiété pour les patients et leurs proches. Pendant la journée opératoire, les proches n'ont pas accès à un suivi de l'avancement du parcours du patient. Une communication par SMS permet de réduire l'anxiété en améliorant la satisfaction de la communication auprès des proches. Cette étude vise à décrire un système d'information en temps réel basé sur l'utilisation des SMS pour informer les proches de l'évolution d'une journée opératoire.

APPROACH

Ce système d'information d'amélioration de la qualité a été mis en œuvre dans un Centre hospitalier de Montréal. Les proches se sont vus offrir la possibilité de recevoir des mises à jour par SMS sur l'avancement du parcours chirurgical du patient. Les messages étaient déclenchés à des moments clés du parcours de soins et étaient adaptés en fonction des différentes trajectoires possibles. Un sondage a été envoyé aux proches pour évaluer la satisfaction, l'effet anxiolytique et pour recueillir les commentaires dans un but d'amélioration du service. Les données ont été recueillies entre le 16 février et le 14 juillet 202.

RESULTS

Le taux de participation était de 76 % (n=6 149/8129). Nous avons transmis 34 129 SMS. Le sondage de satisfaction a été rempli par 34% (n=2 088/6 149) des proches. Au niveau de la satisfaction, les proches ont déclaré être "tout à fait d'accord" que les messages reçus étaient adéquats (71 %), clairs (74 %) et informatifs (72 %). Les proches ont signalé 111 erreurs techniques. Le système a permis de réduire l'anxiété des proches de 8,2/10. Le score global de satisfaction (4,5/5) était fortement corrélé avec la réduction de l'anxiété (rs= 0,608, p<0,001). Les pistes d'amélioration du système ressorties étaient une augmentation de la fréquence des messages, une description plus personnalisée des SMS et une offre de messages dans d'autres langues.

CONCLUSION

Cette innovation technologique à moindre coût a permis l'intégration d'un système standardisé de messages SMS pendant des moments clés de la trajectoire de chirurgie. Cette étude a démontré qu'elle permettrait de réduire le niveau d'anxiété des proches en améliorant la communication avec l'équipe de soins.

88 - Newcomer's Experiences in Accessing and Receiving Primary Healthcare during COVID-19.

Presenter: Bishnu Bajgain

THEME: Primary Healthcare

BACKGROUND AND OBJECTIVES

The entire healthcare system, including primary healthcare (PHC) services, has been disrupted since the onset of the COVID-19 pandemic. As the crisis threatens all citizens significantly, further barriers to accessing care exist for those who are most vulnerable, experience marginalization and have pre-existing challenges. We aimed to explore newcomer patients' (living in Canada ≤5 years) and primary healthcare providers' lived experiences in accessing, receiving, and delivering PHC services during the pandemic.

APPROACH

A qualitative research design was employed: a mix of purposive, convenience, and snowball sampling methods. 18 years and over-aged Calgarian, who were newcomers to Canada and able to speak in English, were recruited via telephone, email, and social media. The primary care providers were recruited from a Family Medicine Center, Calgary, Alberta. 23 semi-structured virtual interviews (15 newcomers and 8 providers) were conducted between February-June 2021. Interviews were digitally recorded and transcribed verbatim. The data were thematically analyzed, using the NVivo Software. Each interview lasted between 45-90 minutes, and a $20 e-gift card was offered to the participants.

RESULTS

Of 23 participants, 15 were newcomers and 8 were primary care providers. Among the patient participants, 46.7% were female, aged between 25-45 years old, and had diverse ethnic backgrounds. Of 8 care providers, 75% were female, included multidisciplinary teams (doctors, nurses, pharmacists, social workers). The data were categorized in three sections: (1) newcomers' overall experiences (doctor-patient relationship, care coordination, expectation on care); (2) virtual care experience (accessibility, accessing care, communication, and care safety and quality); and (3) newcomers' challenges in accessing care [language and cultural difference, care accessibility (availability, waiting time, cost, distance, transportation), unfamiliar healthcare system, facing new life/competing priorities]. Our study revealed that participants had comprehensive experiences with PHC including what matters to newcomers, what works well, and the important areas for improvement.

CONCLUSION

Newcomers to Canada reported many challenges in accessing and receiving primary healthcare and the challenges as such magnified since the onset of the COVID-19 pandemic. The results clarified that additional targeted supports need to be in place in a timely manner to improve equal access to primary healthcare for all.

89 - Nurses’ Social Exchange Relationships with Patients and Families: A New Approach to Patient Engagement

Presenter: Janice Feather

THEME: Patient and Public Engagement

BACKGROUND AND OBJECTIVES

The contribution of nurses in the delivery of safe and quality care is well substantiated in current scholarship. However, explanatory research on the discretionary behavioural mechanisms of how nurses contribute to high quality and safety in critical care settings is not well understood. Therefore, the purpose of this study was to explain the relational workplace behaviours of critical care nurses’ that contribute to high quality and safe patient care.

APPROACH

This study was conducted using a sequential explanatory mixed methods design (Teddlie & Tashakkori, 2009). A quantitative cross-sectional survey was conducted with a random sample of 508 Registered Nurses working in critical care settings in Ontario, Canada. After completion of the quantitative analysis, individual semi-structured interviews were conducted with a random sample of 7 critical care nurses and 6 hospital leaders. Data analysis was conducted using SPSS version 25 for multivariate linear regression and mediation analysis. Qualitative data was analyzed using a deductive and theory informed approach to content analysis (Elo & Kyngas, 2008).

RESULTS

Participants’ Organizational Citizenship Behaviours were negatively associated with medication errors (= -0.13, $p < 0.01$) and missed care (= -0.16, $p < 0.01$), and were positively associated with quality of care (= 0.28, $p < 0.01$). During interviews, participants described their altruistic based workplace behaviours were directed to patients, families, and other nursing team members on their units. Patients and families were considered an integral part of the critical care team, which meant that participants would purposefully engage in organizational citizenship behaviours towards them to increase the quality and efficiency of care delivery.

The surprising qualitative findings of nurses’ Organizational Citizenship Behaviours that are purposefully directed for the benefit of patients and families presents an extension of the current theoretical conceptualization of Organizational Citizenship Behaviours (Podsakoff et al., 2018). The focus on patient-oriented OCB may align with the current shift towards patient experience and patient and family centered care, as an important aspect of high quality of care (Westbrook et al. 2015; Davidson et al. 2017).

CONCLUSION

Development of social exchange relationships and reciprocity between nurses’ and patients/families may be leveraged by nurses, leaders, and researchers to create more effective models of care by strengthening the quality of therapeutic relationships and the degree of patient and family engagement in care.

90 - On the road to building a learning health system for major neurocognitive disorders: intentions, methodology and impact

Presenter: Laura Rojas-Rozo

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

The Quebec Alzheimer's Plan (QAP), aiming to increase primary care capacity to diagnose and follow-up persons with dementia, was implemented across the province in 2016. Providing context-specific information and fostering a reflective practice through discussions with local actors are essential to support a learning health system. The objectives of this study are to describe regional dementia care innovations, their implementation, identify areas of improvement and improve regional portraits.

APPROACH

We conducted a mixed-methods study with a participatory approach. First, we selected, with stakeholders, 9 performance indicators (prevalence, regular physician visits, emergency visits, and hospitalizations) and measured them in 2019. Second, we thematically analysed the last 3 years of ongoing QAP implementation evaluation reports. Quantitative and qualitative results were combined to formulate, with stakeholders, key messages for each local health organization relative to the province. Finally, these portraits will be presented to and discussed with each local organization and QAP implementers. Discussions will be observed, real-time notes taken using structured observation guide, and thematic analysis conducted.

RESULTS

The discussions will enable us to explore regional innovations in dementia care and identify areas of improvement across the province of Quebec. Resources, timeline, role of champions, training, perceived benefits, barriers/facilitators to implementation, effects of the pandemic, expectations, regional particularities will be noted along with dynamics of the meeting and general observations. Discussions will also be used to improve the portraits. At term, it is hoped that these portraits will be regularly updated and integrated into dashboards of regional steering committees.

CONCLUSION

This innovative project supports a learning health system for the care of persons with dementia. Specifically, it will stimulate the emergence of regional and provincial innovations in dementia care to accomplish the implementation of the QAP and ensure its local appropriation and thus, to perpetuate the QAP in sustainably transformed practices.

91 - Optimizing multidisciplinary models and formalizing inter-institutional networks to improve the experiences of migrants living with HIV

Presenter: Anish Arora

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

Multidisciplinary care, alongside patient empowerment and community engagement are essential for instilling equity across health systems, and in turn, establishing improved health outcomes among vulnerable patient populations such as migrants living with HIV (MLWH). However, what is less clear are the experiences of MLWH around current care practices and models, and their suggestions for improving systems to better meet perceived needs, especially amidst the COVID-19 pandemic. Our study endeavoured to respond to these knowledge gaps.

APPROACH

In January 2020, we initiated a 96-week prospective longitudinal cohort study with a convergent mixed-method design at a hospital-based clinic serving the largest proportion of MLWH in Montreal, Quebec. All patients received an approved combination of HIV treatment for free and were provided care by a multidisciplinary team composed of physicians, nurses, social workers, and pharmacists. Preliminary qualitative data are presented here. Eighteen interviews were conducted with 10 MLWH at two time-points (10 after 1 week of starting treatment and 8 after 24 weeks) and were analyzed via thematic analysis.

RESULTS

Three themes were identified: (1) multidisciplinary care enables wholistic and personalized care – MLWH expressed that their needs extend beyond HIV treatment dispensation and that the different clinicians, together, were able to address their complex bio-psycho-social needs; (2) multidisciplinary models need to optimize communication, coordination, and empowerment – MLWH suggested that multidisciplinary teams are only useful when (a) consistent and regular contact is maintained between patients and clinicians, (b) all team members are aware of each other's responsibilities, and (c) clinicians educate MLWH about their HIV and engage them in decision-making; and (3) HIV care extends beyond multidisciplinary teams and requires transition to community-engaged models – MLWH explained that they navigate various clinics and services to manage their HIV, and that they require better coordination between these services.

CONCLUSION

Multidisciplinary settings can enhance care experiences for MLWH, particularly through the complimentary care provided by different clinicians on their team. However, to better address MLWH needs, multidisciplinary models must optimize communication, coordination, and empowerment. Such models must also better incorporate community organizations and allied services, potentially through formalized partnerships.

92 - Organizational Context and Quality Indicators in Long-Term Care Homes: A Microsystem Look

Presenter: Yinfei Duan

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

Organization context (i.e., modifiable elements of work environments) contributes to quality of care in healthcare settings. In long-term care (LTC) homes, the association of organizational context with quality of care is not well understood, especially at the clinical microsystem (care unit) level. To address this critical knowledge gap, this study assessed unit- and facility-level organizational context elements for their association with unit-level clinical quality indicators (QIs).

APPROACH

This was a cross-sectional, secondary analysis of Translating Research in Elder Care (TREC) data collected between 09/2019 and 03/2020. Our sample included 285 care units within 91 Western Canadian LTC homes. Outcomes included thirteen practice-sensitive (i.e., modifiable by care staff) QIs derived from the Resident Assessment Instrument-Minimum Data Set 2.0. Organizational context data were from validated TREC surveys (facility, care unit, care aide). We dichotomized each QI (based on top or bottom quartile), and ran two-level random-intercept logistic regression for each QI to examine its association with contextual factors, controlling for facility and unit-level covariates.

RESULTS

Higher unit-aggregated scores on care aide participation in care decision-making (OR=3.7-8.4, p<.05), care aide perceived staffing (OR=2.6, p<.05) and time for completing care tasks (OR=5.1-7.0, p<.05), and care aide rated unit-level leadership (OR=20.1, p<.05) were associated with better unit-level performance on delirium symptoms, indwelling catheter use, behavioral symptoms, pain, and late-loss physical function. Lower unit-aggregated scores on culture (OR=.02, p<.05), social capital (OR=.06, p<.05), and care aide perceived space to discuss resident care (OR=.45, p<.05) were associated with poorer performance on the inappropriate use of antipsychotics and urinary tract infection. Higher scores on unit managers' organizational citizenship behavior, facility-level meetings with external quality improvement teams, and facility engaging in quality improvement education sessions were also associated with better performance on some QIs.

CONCLUSION

Modifiable elements of organizational context were associated with quality of care at the clinical microsystem level in LTC homes. Targeting modifiable contextual elements is a highly promising avenue for quality improvement interventions. Further investigation will focus on understanding the mechanisms by which these contextual elements affect quality of care.

93 - Over half of clinical practice guidelines use non-systematic methods to inform recommendations: A methods study

Presenter: Carole Lunny

THEME: Knowledge Translation & Exchange (includes KTE methods)

BACKGROUND AND OBJECTIVES

Assessing the process used to synthesize the evidence in clinical practice guidelines (CPGs) enables users to determine the trustworthiness of the recommendations. Clinicians are increasingly dependent on guidelines to keep up with vast quantities of medical literature, and guidelines are followed to avoid malpractice suits. We aimed to assess whether systematic methods were used when synthesizing the evidence for guidelines; and to determine the type of review cited in support of recommendations.

APPROACH

Guidelines published in 2017 and 2018 were retrieved from the TRIP and Epistemonikos. We randomly sorted and sequentially screened CPGs on all topics to select the first 50 that met our inclusion criteria. Our primary outcomes were the number of CPGs using either a systematic or non-systematic process to gather, assess, and synthesise evidence; and the number of recommendations based on systematic or non-systematic reviews. If a review was cited, we determined if it was critically appraised, and recorded which quality tool was used. We examined the association between the use of GRADE, systematic review process, and type of funder.

RESULTS

Of the 50 randomly selected guidelines, 17 (34%) systematically synthesised the evidence to inform recommendations. These 17 guidelines clearly reported their objectives and eligibility criteria, conducted comprehensive search strategies, and assessed the quality of the studies. Of the 29/50 guidelines that included systematic reviews, 6 (21%) CPGs assessed the risk of bias of the review. The quality of primary studies was reported in 30/50 (60%) of guidelines.

CONCLUSION

High quality, systematic review products provide the best available evidence to inform guideline recommendations. Using non-systematic methods compromises the validity and reliability of the evidence used to inform guideline recommendations, leading to potentially misleading and untrustworthy results.

94 - Pathways to STBBI Testing and Linkage to Care in Correctional Settings: Partnering with People with Lived/Living Experience of Incarceration to Co-Create Policies and Guidelines

Presenter: Sofia Bartlett

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Studies suggest that routinely offering Sexually Transmitted and Blood-Borne Infection (STBBI) testing results in high uptake of testing in correctional settings. However, reported increases in uptake are inconsistent and there are reports of policy-related unintended harms. To optimize implementation of routine STBBI testing and treatment in correctional settings, this project incorporates preferences of key stakeholders into the development of routine STBBI testing policies and guidelines (P&Gs) for Provincial Correctional Centres (PCCs) in British Columbia, Canada.

APPROACH

PCC and Correctional Health Services (CHS) leaders were consulted prior to project launch and at critical points along the project timeline. Key stakeholders include people with lived or living experience (PWLLE) of incarceration, CHS staff, and correctional officers (COs). A committee consisting of PWLLE, researchers, clinicians, CHS staff and representatives from community-based organizations oversee the project. Stakeholder engagement activities provide basic knowledge around STBBI testing in correctional centres prior to discussions/surveys around barriers, facilitators, preferences, and experiences with STBBI testing in PCCs. These activities included virtual/in-person workshops and online courses/surveys, as needed to abide by COVID-19 restrictions.

RESULTS

Key results that guided STBBI testing policy and guidelines development included: (1) the preference that everyone being tested after they give consent (PWLLE 76%;n=114/170)(CHS 74%; 29/39)(COs 57%; 60/105); (2) the need for testing to be offered at multiple times, including at intake (PWLLE=63%; 102/163), at the first health care provider appointment (PWLLE=34%; 56/102), and during the first week of arrival (PWLLE=29%; 48/163); (3) privacy concerns could stop incarcerated people from getting STBBI tested [50% (14/28) of LGBTQ2S+ and 32% (43/135) of non-LGBTQ2S+ said]; and (4) reducing stigma - 43% (72/66) of PWLLE said fear of being stigmatized could stop them from getting STBBI tested while incarcerated; 46% (19/41) of CHS listed stigma as a main barrier to STBBI testing at their centre.

CONCLUSION

Results indicate that to improve the acceptability, safety and uptake of new STBBI testing and treatment, P&Gs in PCCs must: address stigma; require informed consent; offer multiple testing options/time points; ensure there is privacy/confidentiality, consistency in testing protocols, cultural safety, and protocols for linkage to community care.

95 - Patient and informal caregiver experiences in inpatient specialist palliative care settings: A scoping review

Presenter: Monisha Kabir

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Inpatient specialist palliative care (SPC) settings are characterized by patients that are older, have lower functional status, and short lengths of stay until death or discharge. To date, there is no published review that comprehensively summarizes patient and informal caregiver experiences in these settings. Understanding their experiences may facilitate recommendations for future research and improvements to practice. Our aim was to examine the volume and nature of literature on this topic using a scoping review.

APPROACH

We consulted with an information specialist (LS) to develop our search strategy. We searched Medline, Embase+Embase Classic, CENTRAL, PsycINFO, CINAHL, Cochrane's Database of Systematic Reviews, and DARE from database inception to September 17, 2020. We also conducted citation and grey literature searches. Search terms included 'patient', 'informal caregiver', 'experience', and synonyms. Screening was completed in duplicate using pilot-tested criteria. Data was charted from included records using a pilot-tested data extraction form. We used frequency counts and descriptive qualitative content analysis to aggregate key concepts into themes.

RESULTS

Database, citation, and grey literature searches, and incidental findings yielded 4190 records, of which 104 studies were included. Of these, 26 included patients, 54 included ICGs, and 24 included patients and ICGs as participants. We identified three themes: i) perceptions of care, the interprofessional care team, and the care environment; ii) communication with the interprofessional care team; and iii) impacts of illness and care on quality of life. Patients and ICGs were largely satisfied with the care offerings, teams, and environments. Some reported misunderstandings about palliative care. The lack of person-centred care and curative interventions offered, and inadequate staffing were sources of dissatisfaction. Both groups reported unmet information and psychological support needs.

CONCLUSION

This scoping review comprehensively summarizes the available literature on patient and ICG experiences within inpatient SPC settings. There is a need for further supports to enable the provision of person-centred care and ongoing education about the palliative care approach to patients and informal caregivers.

96 - Patient and informal caregiver sense-making of illness and care on an inpatient specialist palliative care unit during the COVID-19 pandemic: An interview study

Presenter: Monisha Kabir

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

In inpatient specialist palliative care (SPC) settings, it is important to identify and address patient and informal caregiver needs and associated sense-making. Sense-making is a process of existential and experiential learning that may be undertaken by patients and informal caregivers (ICGs) in handling or adjusting to an altered or uncertain life situation, such as life-threatening illness. We aimed to examine patient and informal caregiver sense-making on an inpatient SPC unit during the COVID-19 pandemic.

APPROACH

Adult, English-speaking patients and ICGs (non-bereaved and bereaved) who experienced care on a 31-bed inpatient SPC unit in Ottawa, Canada were recruited through their circle of care, posters, and mail-outs between November 3, 2020 to February 15, 2021. Eligible patients and ICGs participated in semi-structured, audio-recorded phone or video interviews. Themes were identified using an iterative, inductive thematic analysis. All participants experienced care on the inpatient SPC unit during the COVID-19 pandemic, which impacted their experiences and sense-making on the unit, and posed recruitment challenges.

RESULTS

Out of 21 potential participants approached, three patients (mean age 60.3 years; male: n=2, female: n=1) and four ICGs (mean age 65.5 years; female: n=4) participated in interviews. Three key themes were identified: i) the journey of dealing with life-threatening illness, ii) impacts of the COVID-19 pandemic on experiences of illness and care, and iii) attempts to cope and find peace. Though patients and ICGs reported receiving high-quality care, some identified gaps in person-centred care. Pandemic-related visitation restrictions and isolation periods added to patient and ICG psychological distress and social isolation. The process of sense-making, and therefore coping, was complex and facilitated by not fearing death, support from other family members, and religious beliefs. Family conflict and feeling overwhelmed hindered sense-making.

CONCLUSION

Inpatient SPC settings typically provide care for a short time and involve a substantial change in environment for both patients and informal caregivers. This study highlights the need for further supports for delivering person-centred care and addressing patient and ICG distress in inpatient SPC settings throughout current and future pandemics.

97 - Patient Engagement in the Era of COVID-19

Presenter: Jane Sandercock

THEME: COVID-19

BACKGROUND AND OBJECTIVES

The rapid onset of COVID-19 in early 2020 prompted an examination of the state of patient engagement (PE) activities during the first year of the pandemic. Case studies of a series of Canadian healthcare organizations able to sustain or pivot their PE activities during the pandemic produced insights into enabling factors that allowed rapid adaptation to evolving contexts. We discuss PE activities, insights, lessons learned and alignment with the Engagement Capable Environments (ECE) framework concept.

APPROACH

We adopted a qualitative, multiple case study approach following an environmental scan (including a scoping review of literature and key informant Zoom meetings from across Canada) that identified eight organizations who were perceived as having maintained or pivoted PE practices through the pandemic. Our examples vary by organizational type, size and geographic setting with the goal of understanding contextual variables, specific practices and delineating transferrable lessons that may be useful to other organizations. Our cases were drawn from British Columbia, Saskatchewan, Ontario, Quebec and Nova Scotia. Thirty-four individual interviews were conducted from June to October 2020.

RESULTS

Over-arching insights across cases included that many organizations initially halted PE activities to focus on pandemic responses, consequently excluding patient and caregiver partners from COVID-19 planning and decision-making. However, having a history of patient partnership within the organization seemed to support sustained or more rapid resumption of PE activity. Further, COVID-19 presented a “window of opportunity” to implement care changes much faster than before.

Factors that enabled, sustained and supported PE during the pandemic aligned with three components of the ECE framework including: enlisting and preparing patients; engaging staff to involve patients and ensuring leadership support and strategic focus. Lessons emerged related to leadership buy-in, transparency and direct contact, in addition to engagement timing, tools, diversity and commitment to consistency.

CONCLUSION

Organizations with a history and commitment to patient and caregiver engagement provide useful lessons for other organizations who seek to improve their response and adaption to future disruptions, in ways that preserve patient and caregiver trust.

98 - Patient Satisfaction with Teleophthalmology in Ocular Oncology

Presenter: Paige Campbell

THEME: Cancer

BACKGROUND AND OBJECTIVES

Teleophthalmology is beneficial for decreasing barriers to accessing care. Many communities lack access to specialized care such as ocular cancer, thus telemedicine eases patient burden of care as providers can remotely monitor eye disease. This contributes to the lengthy waitlists that can be detrimental in cancer treatment. The purpose of this study is to evaluate patients' satisfaction with a teleophthalmology program for ocular oncology and whether it addressed their healthcare needs.

APPROACH

An adapted version of the Telehealth Satisfaction Scale (TeSS) and four open-ended questions were used. Verbal surveys were conducted with consenting, adult patients engaged in a telemedicine program of an ocular oncology clinic. The teleophthalmology program includes diagnostic imaging, remote physician assessment, and a follow-up phone call from a member of the healthcare team to relay results to patients. This highly specialized eye cancer clinic conducts 22-35 telemedicine appointments per week.

RESULTS

To-date, patients surveyed (response rate = 87%) had received care from the teleophthalmology program 3 to 4 weeks prior to participating in this study. The satisfaction scores on the TeSS items indicated a high satisfaction with the telehealth program for monitoring indeterminant lesions. The scores range from 28 to 32 out of a total of 32. The median score was 32 (SD = 1.57). Approximately 27% participants live in rural communities where patients travel 27 to 110 kilometers to receive specialized ophthalmology care in-person. Overall, patients responded positively to open-ended questions stating the convenience and lack of waiting times was preferred to in-person appointments. Four patients advocated for further use of technology in additional modalities as they appreciated regular communication with their healthcare providers.

CONCLUSION

Teleophthalmology increases access to specialized care for both urban and rural populations, while decreasing strain on the healthcare system. The analysis demonstrates that patients of an ocular oncology clinic are highly satisfied with the telemedicine program. Telemedicine mitigates access barriers to specialized care for patients while still meeting patients' needs.

99 - Patient-reported outcomes for medication-related quality of life: A scoping review

Presenter: Lauren Cadel

THEME: Chronic Disease Management

BACKGROUND AND OBJECTIVES

The use of medication is common for the prevention and management of health complications. Taking medication requires the management of a number of factors that can impact quality of life (QoL), including side effects and costs. However, a preliminary literature scan revealed minimal patient-reported outcomes (PROs) to assess medication-related QoL. Therefore, the objective of this scoping review was to identify and summarize the extent of literature on PROs for medication-related QoL.

APPROACH

A scoping review of the literature was conducted. Four electronic databases, Medline, Embase, PsycINFO and Health and Psychosocial Instruments, were searched for relevant literature. For inclusion, articles were required to be peer-reviewed, original research that included a PRO for medication-related QoL and reported its psychometric properties. Title and abstract and full-text screening followed the same process; articles were double screened by two independent reviewers, and all disagreements were resolved through discussion with a third reviewer. Data were extracted using a form in Microsoft Excel and analyzed using descriptive approaches.

RESULTS

After screening 8,878 titles and abstracts and 170 full-texts, 86 articles were included in this scoping review. We identified 80 unique PROs, with the majority targeting specific health conditions including cancer (n=9) and diabetes (n=8), as well as individuals taking medication for non-specific conditions (n=7). Fifty-three of the PROs measured treatment satisfaction and 18 measured medication-related QoL. Internal consistency was the most reported psychometric property (n=75), followed by construct validity (n=72), which included articles that reported convergent (n=45) or discriminant validity (n=42), or both (n=30). All PROs (n=80) assessed physical health but fewer assessed other QoL dimensions (e.g., autonomy, interactions with providers).

CONCLUSION

The majority of PROs were designed for condition-specific or medication-specific populations, with few for general medication-related QoL. Future research should focus on assessing medication-related QoL measures for broader populations such as those with disabilities, multimorbidity, or experiencing polypharmacy.

100 - Patients' Perspectives on Social Determinants of Health Data Collection and Use During General Internal Medicine Hospital Admissions

Presenter: Victoria Davis

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

Health providers recognize the importance of the social determinants of health (SDoH), yet rarely collect SDoH data. Data collection and community referrals could improve patient care, decrease costs, and reduce hospital readmissions. However, it is unclear if data collection and interventions are acceptable and feasible during hospital admissions. This exploratory study aims to understand inpatients' perspectives on SDoH data collection and the hospital's role in helping with patients' SDoH needs in General Internal Medicine (GIM).

APPROACH

This qualitative research uses Thorne's (2008) interpretive description approach and was guided by Woodward and colleagues' (2019) Health Equity Implementation Framework and Krenshaw's (1991) intersectionality theory. Seventeen patients of diverse races, genders, and SDoH needs, were purposefully recruited from the GIM ward at a large academic hospital in downtown Toronto. In-depth, semi-structured interviews investigated patients' attitudes about being asked SDoH questions, their importance, barriers and facilitators to data collection, and what should be done to help with their needs. Interviews were transcribed, and inductive coding and thematic analysis was performed. The data was managed in NVivo.

RESULTS

Preliminary findings indicate that SDoH data collection in GIM could be useful for research purposes, to inform holistic care, and assist patients with navigating community organization referrals or creating in-hospital programs to address needs. Patients commonly reported feeling uncertain about who would administer SDoH questions and help them with their needs, given that the hospital staff were overwhelmed tending to their medical care. SDoH questions can be intrusive and very personal for patients. Emerging themes suggest trained staff should sit down with patients and verbally ask about their needs in a compassionate, trustworthy manner. Common systems-level and individual-level barriers to disclosing this information and asking for help include: negative experiences with healthcare or community agency workers; being pitied or judged; and privacy and confidentiality.

CONCLUSION

Patient-centered and goal-oriented SDoH data collection and interventions would be acceptable and helpful for many patients with unmet needs in hospitalized GIM settings. This work can guide future research and implementation efforts aligned with more equitable, value-based care models that reduce underlying causes of illness and provide high-quality patient care.

101 - Personal and workplace predictors of nurse turnover intent

Presenter: Farinaz Havaei

THEME: Health Human Resources

BACKGROUND AND OBJECTIVES

The COVID-19 pandemic has resulted in a worsening shortage of health human resources in the world. In Canada, this shortage has been more prominent among the largest health human resource, the nursing workforce. An increasing number of nurses have left their jobs or the nursing profession altogether due to unique challenges of the COVID-19. The proposed study will identify the most important personal and workplace risk factors of nurse turnover intent.

APPROACH

This is a secondary analysis of data from nearly 3500 regulated British Columbia nurses who were invited by the British Columbia Nurses' Union to complete an electronic cross-sectional survey in May 2021. Outcome measures include the likelihood of profession turnover, job turnover and the anticipated time of turnover. Predictors include personal (e.g. mental and physical health) and workplace (e.g. staffing and workload, workplace health and safety, exposure to COVID-19 patients) factors. Control variables include demographics (e.g. age) and workplace (e.g. sector) characteristics. Data will be analyzed using hierarchical multiple regression analysis.

RESULTS

Data analysis is currently underway. The findings will identify the personal and workplace characteristics most predictive of profession and job turnover intent and their anticipated time among nurses.

CONCLUSION

The findings will shed light on proactive strategies and policies that will protect nurses against personal and workplace risk factors of nurse turnover.

102 - “Physical activity to me is just walking”: A Qualitative Study of Individuals’ Perceptions of Physical Activity following Amputation

Presenter: Crystal MacKay

THEME: Chronic Disease Management

BACKGROUND AND OBJECTIVES

People with lower limb amputations (LLA) often have deficits in balance and limited walking ability. As a result, people with LLA are often sedentary. Little is known about individuals’ perceptions and experiences of physical activity following amputation. The aim of this study was to explore perceptions of physical activity from the perspective of people with LLA, focusing on how people conceive of physical activity and enact it in their daily lives.

APPROACH

A qualitative descriptive study situated within an interpretive research paradigm was conducted. Semi-structured interviews were held by telephone or in-person with adults living with major LLAs recruited from rehabilitation hospitals in Toronto, Canada, and advertisements on social media. Eligibility criteria included: 1) ≥18 years of age with a major LLA; 2) ability to communicate in English; and 3) ability to participate in a 60-minute interview. Purposive sampling was employed to ensure variation by sex, geographic location, cause and level of amputation. Thematic analysis was conducted.

RESULTS

Thirty-three people with LLA participated (23 men/10 women; median age 63 years). The majority of individuals had a unilateral, transtibial amputation (~50% dysvascular amputations). For most participants, physical activity centred on walking and completing routine tasks in their daily lives (e.g., laundry, shopping). To a lesser extent, participants described engagement in formal structured exercise, such as strength training. Physical activity was viewed as a means to retain and improve their mobility (e.g., improve walking); maintain independence in their daily life; facilitate social interactions; improve overall health; and enhance their mood (e.g., physical activity provided a sense of accomplishment).

CONCLUSION

Participants’ perspectives help us understand how people think about physical activity, what motivates them and how we can optimize physical activity levels. Future research is needed to evaluate the effectiveness of community interventions to enhance physical activity in this population.

103 - Potentially inappropriate prescribing in long-term care residents and its association with probable delirium

Presenter: Colleen Webber

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

Delirium is a serious neurocognitive condition that presents as disturbances of attention, perception, and behaviour. Long-term care (LTC) residents are particularly vulnerable to delirium given their high degree of frailty and complex health needs. Medications may also contribute to an increased risk of delirium due to drug toxicities, polypharmacy, and drug interactions. This study examined potentially inappropriate prescribing (PIP) of medication and its association with probable delirium among LTC residents.

APPROACH

We conducted a cross-sectional study of Ontario LTC residents using the Resident Assessment Instrument – Minimum Dataset (RAI-MDS) between January 1, 2016 and December 31, 2019. We used residents' first assessment in the study period as the index assessment. Probable delirium was identified via the delirium Clinical Assessment Protocol ment. Medication use in the two weeks preceding assessment was captured using medication claims data. PIP was measured via the STOPP/START criteria and Beers criteria, with residents classified as having 0, 1, 2, or 3+ PIPs. Associations between PIP and probable delirium was assessed via bivariate and multivariable logistic regression models.

RESULTS

The study population included 171,190 LTC residents. The mean age was 84.5 years, 66.8% were female, and 62.9% had dementia. Probable delirium was documented on 3.7% of resident assessments. Over half (51.8%) of residents had 1+ PIP and 21% had 3+ PIPs according to the STOPP/START criteria. The odds of probable delirium increased as the number of PIPs increased. Probable delirium was 1.86 times more likely (95% confidence interval 1.74-1.98) in residents with 3+ PIPs compared to those with no PIPs after confounder adjustment. Similar findings were observed when PIP was evaluated using the Beers criteria.

CONCLUSION

This population-based study highlighted that potentially inappropriate medication prescribing was highly prevalent and was significantly associated with the increased odds of probable delirium among LTC residents.

104 - Practices and Perception of Governance in Integrated Care: A Mixed-Methods Study of Ontario Health Teams

Presenter: Kaileah McKellar

THEME: Collaborative Healthcare Improvement Partnerships

BACKGROUND AND OBJECTIVES

In 2019, Ontario's Ministry of Health launched Ontario Health Teams (OHTs), which seeks to ensure that all health care organizations, providers, and patients across the province are connected to an integrated team with responsibility for eventually providing all healthcare services for a specific population. Early foundational work of OHTs included establishing a governance structure and collaborative decision-making arrangements. Our objective was to understand promising practices and common challenges in the governance of OHTs.

APPROACH

As part of a central evaluation of OHTs, we are conducting a mixed-methods study with data from two surveys distributed to 50 OHTs and a qualitative case study with six OHTs. The Organizing OHTs survey was developed using the Context and Capabilities for Integrated Care framework. The second iteration includes a focus on governance and will be distributed in February 2022. Before the launch, one representative was asked to complete a survey to describe their governance practices. Survey results are contextualized with qualitative results, which allowed for a deeper understanding of promising practices and challenges in governing OHTs.

RESULTS

The governance practices survey was completed by all approved OHTs. Based on the previous surveys in 2020 and 2021, we expect a 75% response rate to the Organizing OHTs survey. This presentation will describe the level and variation in governance practice and perceptions of their effectiveness. We will compare against measures of collaboration, communication, partnership, trust, common vision and readiness for organizational change. Qualitative data shows several OHT cases recognized governance as an area of improvement and they were interested in learning about best practices for OHTs.

CONCLUSION

Governance is recognized as an essential factor in health system performance. This study will provide an early indication of OHT governance models and practices across OHTs. Promising practices in governance will need to consider the varying and unique contexts of OHTs.

105 - Preliminary findings from The Landmark Study: Dementia Prevalence and Incidence in Canada 2020 to 2050

Presenter: Joshua Armstrong

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

As with many nations, the prevalence of dementia in Canada is expected to rise dramatically in the upcoming decades as the population ages. The Landmark Study is aimed at updating these estimates and the broader population changes associated for the Canadian population made in the 2010 Rising Tide Report.

APPROACH

Using the Canadian Centre for Economic Analysis's socio-economic statistical analysis platform, a simulation model was developed using demographic characteristics (age, sex, ethnicity) and risk factors for dementia to forecast the burden of dementia in Canada over the next 30 years. This approach allows for comparisons across sex, ethnicity, provinces, while accounting for population dynamics including immigration. The model was also used to examine how a delay in incidence (1-year, 5-years, 10-years) would impact prevalence and incident cases.

RESULTS

As expected, the model forecasts the number of Canadians with dementia to more than double in the next 30 years: 493,718 (2020; 59.6% female) to 1,296,707(2050; 61.2% female). With changing immigration patterns, the ethnic background of people with dementia will be quite different than today. People with Asian origin could increase from 8% of people with dementia today to 24% by 2050. Delays in onset of dementia by 1 year would avoid over 300K cases in Canada, whereas a deferred incidence of 10 years would bring Canadian dementia rates to lower than where it is today. The number of informal caregivers in 2020 (349,551; 472.6 million hours/year) is projected to increase in 2050 to 1,005,815 (1,386 million hours/year).

CONCLUSION

This study forecasts rising dementia prevalence in Canada, illustrates the changing landscape of ethnicity in Canadians living with dementia, and estimates the population-level impacts of interventions that delay onset of dementia would have on prevalence, incidence, and informal care.

106 - Prevalence and complexity of multimorbidity among frail patients receiving home care in Ontario: a retrospective cohort

Presenter: Ricardo Batista

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

Language is an important socio-cultural factor related to health and wellbeing, and linguistic barriers can negatively affect access to health services and the quality and safety of care. As the population ages, many people with multiple chronic diseases need long-term care services, and this process can be further challenged by linguistic factors. This study aimed at describing the characteristics and multimorbidity of Ontario's frail population receiving home care services, stratified by linguistic group.

APPROACH

Population-based retrospective cohort of 510,685 adults receiving home care between April 1, 2010, to March 31, 2018, in Ontario, using linked administrative health databases. We described the prevalence and complexity of multimorbidity across linguistic groups. We examined complexity of multimorbidity using two approaches: a) grouping individuals based on the number of chronic diseases and identifying the five most frequent combinations in each group, b) using a clinical criteria approach to create disease clusters relevant for disease management and healthcare outcomes, among those with multimorbidity (2+). We used logistic regression models to explore the main predictors of 'severe' multimorbidity (5+ diseases).

RESULTS

Overall, 92% of the cohort had multimorbidity (2+ chronic diseases), and 44% had severe multimorbidity (5+ diseases). Multimorbidity was highest in Allophones, at all levels than Anglophones and Francophones. Francophones were overrepresented in the cluster of CVD-Resp. diseases (64.9%) compared to Anglophones (60.2%) and Allophones (61.5%). Anglophones were substantially more prominent in the cancer cluster (34.2%) compared to Francophones (25.2%) and Allophones (24.3%). Relative to Anglophones, Allophones were significantly more likely to have severe multimorbidity (adjusted OR=1.04, [95% CI: 1.02-1.06]). The risk of severe multimorbidity (5+) increased with age. We found a clear gradient on the risk of severe multimorbidity by the neighborhood income level. Living in the province's eastern region was also associated with a higher risk of severe multimorbidity (aOR=1.07, [95% CI: 1.05-1.09]).

CONCLUSION

We found a high prevalence of multimorbidity among home care recipients in Ontario. We found differences in the prevalence and complexity of multimorbidity across linguistic groups, more notably are among Allophones. These findings can have policy implications for implementing healthcare services to address ethnocultural needs for minority linguistic groups.

107 - Promoting vaccine confidence in Provincial Correctional Centres: co-developing strategies with people who are incarcerated

Presenter: Sofia Bartlett

THEME: COVID-19

BACKGROUND AND OBJECTIVES

People who experience incarceration are more likely to acquire COVID-19, be hospitalized for it, and die from it. Vaccinations have been proven to significantly mitigate adverse outcomes. However, vaccine acceptance among people who are criminalized is low compared to the overall population. The Addressing COVID-19 Vaccine concerns AmoNg people who are incarCeratEd (ADVANCE) Study aims to co-develop peer-to-peer education strategies that promote COVID-19 vaccination in Provincial Correctional Centres with incarcerated peoples.

APPROACH

This participatory health research (PHR) project uses mixed-methods to inform integrated knowledge translation (IKT) with people who are incarcerated (PWAI), over 4 phases: (1) survey co-development focus groups; (2) survey engagement; (3) education strategy co-development focus groups; (4) evaluation. Phase 1 engaged people in 2 Provincial Correctional Centres (PCCs). Phase 2 engaged 10 PCCs' Residents (PWAI) and Staff, and people released during the pandemic. With greater understanding of what contributes to low vaccine confidence among people who experience incarceration (P1 - P2), we are co-developing, testing, and implementing peer-to-peer educational strategies to promote vaccine confidence among them (P3 - P4).

RESULTS

We will have results to present in March, but are currently in Phase 1 of the study. Summaries of focus group data and aggregates of key survey results will be presented. Both sets of data will (1) illustrate the study's emergent design; (2) provide unique insights to determinants of low vaccine confidence among people who experience incarceration, and opportunities to optimize vaccine literacy, confidence and uptake among them.

CONCLUSION

The ADVANCE study is establishing foundational approaches to PHR and IKT with PWAI. We anticipate that the knowledge developed throughout inform approaches to support and improve health literacy, health outcomes, healthcare quality and confidence among PWAI beyond COVID-19 vaccination. This is important work in addressing persistent health and justice inequities.

108 - Public engagement in Canada's long-term care (LTC) policymaking

Presenter: Jeonghwa You

THEME: Patient and Public Engagement

BACKGROUND AND OBJECTIVES

The COVID-19 pandemic has highlighted the long-standing deficiencies in Canada's long-term care (LTC) sector. Calls for government action to ensure the delivery of high-quality LTC have skyrocketed. As policy reform is debated, it will be critical to include the voices of those directly impacted by policy decisions. This study aims to inform these decisions by describing past and current public engagement (PE) efforts in this policy sector and the political influences that have shaped these initiatives.

APPROACH

This study employed a comparative case study design and examined three cases: 'the development of the Long-term Care Homes Act in Ontario [2004~2010], Ontario's COVID response in relation to LTC, [2020~2021], and the development of National Long-term Care Standards at the Federal level [2021~2022]. Data sources include publicly available and internal government documents, news articles, organizational websites. PE was described using predefined categories (i.e. rationale/goals, participants, recruitment methods, type of PE), and the political environment was analyzed employing the 3-I framework – a well-known framework for analyzing the political influences on policymaking.

RESULTS

Case findings demonstrate that most of the PE initiatives undertaken were characterized by 1) engagement of multiple stakeholders, with many 'proxies' for the public, 2) reliance on targeted invitation along with self-selection methods for recruitment, and 3) frequent use of consultation-type activities. They also varied in terms of 1) how diverse interests at stake were represented, 2) whether the engagement opportunities were open and inclusive, and 3) if the format of engagement was responsive and reasonable. To explain these differences, we reflect on the surrounding political environment and hypothesize that when the surrounding political environment is supportive of the government's intended policy direction, it favours open and inclusive PE initiatives.

CONCLUSION

Meaningful PE can effectively reflect the needs and wants of those directly impacted, ultimately resulting in higher-performing systems. In this regard, understanding how the public is engaged in LTC policy decision-making and what shapes different approaches provides valuable insights into how to help rebuild a person-centred LTC sector in Canada.

109 - Public health and primary health care collaboration in seven high-income countries during the COVID-19 pandemic, a cross-jurisdictional policy analysis

Presenter: Jane Zhao

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

The COVID-19 pandemic highlights the importance of strong public health (PH) and primary health care (PHC) systems to respond nimbly and effectively during times of crisis. Both play a crucial role in triage and prevention, management, vaccination, and communication. PH and PHC systems, however, often act in parallel streams, but rarely together.
The objective of this study is to describe PH and PHC collaboration during the COVID-19 pandemic in seven high-income countries.

APPROACH

In-depth case study reports were generated for each country or jurisdiction. Reports searched both peer-review publications and grey literature on five dimensions identified by the World Health Organization regarding COVID-19 management. Reports included country-specific health system descriptions, PH and PHC actions during the pandemic, and an evaluation of strengths and weaknesses. Expert validation was conducted by internal country stakeholders prior to cross-jurisdiction analyses.
Thematic content analysis was conducted on all reports to develop a coding framework. Codes were identified that were relevant to the research questions. The study team discussed and reconciled discrepancies in themes until consensus was reached.

RESULTS

Data was collected from seven high-income countries (Belgium, Canada, Germany, Japan, the Netherlands, Norway, and Spain) from March 2020 to July 2021. Four key themes were identified along with respective strengths/weaknesses.
1) Health information systems: this played a critical role for disease containment and management when designed for efficient data management and cross-sectoral data-sharing.
2) Communication: In countries where PHC was engaged early on, PH messages were amplified; in other countries, a lack of cohesion in communication resulted in poor or delayed community-level responses.
3) Human resource capacity: Health human resources were overwhelmed, with many staff redeployed and undertrained.
4) Professional training: Health professionals who received dual training in PH and PHC acted as strong community champions and may be a bridge for future pandemics.

CONCLUSION

Health system needs shifted dramatically throughout the COVID-19 pandemic. Our findings highlight four key lessons regarding PH and PHC collaboration from seven high-income countries. Future pandemic preparedness should focus on health information systems and data management, PH communication, health human resources, and education and training.

110 - Quantifying Nurse Workload and Care Quality Indicators with Simulation: Future Health Human Resources Decision Support Tools

Presenter: Sue Bookey-Bassett

THEME: Health Human Resources

BACKGROUND AND OBJECTIVES

The COVID-19 pandemic has exacerbated the long-standing issue of nurse workload across all health sectors. There is an urgent need for tools to quantify nurse workload under pandemic outbreak scenarios such as COVID-19. The study objective was to design a tool to test various organizational design and staffing policies, while caring for COVID-19 patients to determine the impact of these decisions on nurse workload and quality of care – Discrete Event Simulation offers a potential solution.

APPROACH

Our nursing-engineering team created a Discrete Event Simulation (DES) model for a medical-surgical unit, in a large teaching hospital, based on task frequency (historical patient care data), nurse logic (focus groups), and care task priority sequence data obtained from the site. DES is an operations research tool that can be used to simulate the process of care delivery for nurses on a task-by-task basis. It is used to examine the 'flow' of the system over time on a step-by-step basis. This novel approach simulates nursing workload from the nurse perspective versus modeling patients as a product in a production system.

RESULTS

The validated DES model revealed how nurses are required to perform 14-hours of tasks in a 12-hour shift. Nurses walk up to 12 km/shift and rarely take breaks. When nurses were assigned to more COVID-19 positive patients, they spent less time delivering care as nurses were, according to policy, required to don and doff 106 times per shift, equivalent to over 6 hours of work. Nurses' mental workload scores, however, increased from an average of 25 care tasks waiting (pre-pandemic) to 75 care tasks per shift (during the pandemic). Increased nurse cognitive workload was associated with increased missed care (up to 143% increase) and wait times for care delivery (70% increase).

CONCLUSION

COVID-19 infection control routines increase nurse workload and impact care quality. Overworked nurses cannot complete essential patient care in 12-hour shifts, resulting in missed and delayed care for patients. The novel modeling capability allows us to quantify the impacts of changing work conditions presenting potential as a decision support tool.

111 - Requirements or Status Quo? A case study of current administrative data access privacy safeguards for multi-province research

Presenter: Donna Curtis Maillet

THEME: Health Policy, Healthcare Reform (includes priority setting, politics)

BACKGROUND AND OBJECTIVES

Health researchers in Canada seeking to access administrative data across provincial and territorial borders for research are continuously met with denial of access impeding their work, even when explicit patient consent for data linking and sharing is provided.

Health Data Research Network Canada (HDRN Canada) is working to identify solutions to multiple jurisdictional research challenges.

Focusing on the potential for legislative and policy solutions, HDRN Canada has embarked on a case study examination of these barriers.

APPROACH

In partnership with a large clinical trial research network, we are mapping, in real time, the data access request processes for a 7-province research study seeking to link at the individual-level, one variable from administrative data to clinical trial data for centralized analysis. Line-level data are needed to make full use of the sample size across provinces, as an aggregate comparison of outcomes across regions is not sufficient for conducting analysis with enough scientific validity to inform clinical care. Data collection and methods for this case study include document analysis, process mapping, interviews, and policy analysis for multiple Canadian regions.

RESULTS

This study builds on our 2020 exhaustive review of Canadian provincial / territorial privacy legislation that found, in general, legislation does not preclude the desired access, use or disclosure of data across borders.

Most often, barriers arise from the layers of legislation interpretation and policy that researchers must navigate, adding cost, delay, and frustration to their work. The result is an avoidance to request access to administrative data.

Contributing to the frustration is the lack of policy harmonization across Canadian regions combined with opaque and inflexible interpretations.

Twenty-five to 30 hours were required to complete administrative data access request activities for this 7-province study. In the absence of transparent decision-making researchers aspiring for more than obtaining aggregate data for meta-analysis face a 'black box' when structuring their requests.

CONCLUSION

This work will provide an evidence-based review of processes and policies affecting access to administrative data for pan-Canadian research. A systematic study of privacy safeguards will provide significant and necessary leverage to lobby for change in legislation and policy and allow for harmonized data access for multi-regional research.

112 - Research on violence in home care: A scoping review

Presenter: Kevin Balkaran

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Violence, both towards and from caregivers and care recipients, is a widespread issue in home care settings. Violence can include physical abuse against clients by home care workers during routine care sessions, or verbal abuse directed towards home care workers by clients to express frustrations, and/or exercising power and control over clients through financial incentives, among other examples. The aim of this scoping review is to recognize the current climate of violence in home care.

APPROACH

Databases selected for searching were: Medline and EMBASE on OVID; Scopus; and Academic Search Complete, AgeLine, and CINAHL in EBSCOhost. Searches were limited to articles published in English from 2011 to 2021 involving participants over 18 years old. Only articles that reflected primary research on violence in home care were included in this scoping review. Abstracts and titles were screened by two independent screeners using Covidence review manager, followed by full text reading. Relevant data from included articles were collected and synthesized by employing open and axial coding techniques.

RESULTS

Preliminary findings suggest there is more research published on violence towards home care workers than there is towards clients. Home care workers experience caregiver distress; workers who experience violence are more likely to experience symptoms of depression. Factors that make workers susceptible to abuse include working more hours than agreed and having little time off work. Violence towards workers is normalized in home care; violence is viewed as ‘part of the job’. Findings from prevention studies suggest intervention techniques may reduce violence towards workers in home care; for example, agencies that implement reporting guidelines for experiencing client-initiated abuse convey steady reporting from workers and contributes to a safe work environment. The scoping review will be finalized in March 2022.

CONCLUSION

The findings from this review will allow organizations to recognize whether policies and procedures continue to meet the health needs of home care workers and clients given the current climate of violence. The trends identified in this scoping review will assist the research community to identify further gaps in research.

113 - Revisioning healing practices in Indigenous and biomedical hospital care: Case Study of Stanton Hospital, NWT

Presenter: Sophie Roher

THEME: Indigenous Health

BACKGROUND AND OBJECTIVES

The Truth and Reconciliation Commission has called for improved collaboration between Indigenous and biomedical healing approaches. Likewise, in the Northwest Territories, where over 50% of residents are Indigenous, local Indigenous leaders have emphasized the need for better collaborative healthcare models at Stanton Hospital. In support of these calls, we report findings from a qualitative study examining how Indigenous patients and biomedical healthcare providers understand and experience Indigenous wellness services and healing practices at Stanton Hospital.

APPROACH

This study sought to: (1) examine how Indigenous patients and biomedical healthcare providers understand and experience the Indigenous wellness services at Stanton Hospital; and (2) explore how patients and providers might envision Indigenous healing successfully working with biomedical hospital care. The qualitative study was carried out from May 2018-May 2022. It was overseen by a regional Indigenous advisory committee and was conducted in accordance with OCAP principles. Guided by Two-Eyed Seeing and a narrative approach, the study involved 41 interviews with Indigenous Elders, patient advocates, healthcare providers, and policy makers, as well as iterative sharing circles with Indigenous Elders.

RESULTS

Elders and patient advocates emphasized that while the Indigenous wellness services at Stanton Hospital play a critical role connecting patients with cultural supports, the hospital was still not effectively bringing Indigenous healing into hospital care. Participants suggested that various structural factors (i.e. policy and governance decisions) and deeply-rooted forces (i.e. racism, colonialism, and biomedical dominance) underlie the delivery of care at Stanton Hospital and inhibit the integration of Indigenous healing. Additionally, participants' responses for how they envisioned Indigenous healing successfully working with biomedical hospital care revealed three potential models for Indigenous and biomedical collaboration: (1) the integration model, (2) the independence model, and (3) the revisioning relationship model.

CONCLUSION

The findings of this study underscore that greater structural and systemic transformations may be needed to promote meaningful collaboration between Indigenous healing and biomedical hospital care and to improve the delivery of culturally safe care for Indigenous patients.

114 - Safe birth and cultural safety after an intervention to support traditional midwifery in Southern Mexico: non-inferiority cluster-randomised trial

Presenter: Ivan Sarmiento

THEME: Indigenous Health

BACKGROUND AND OBJECTIVES

Available research on the contribution of traditional midwifery to safe motherhood focuses on retraining and redefining traditional midwives assuming cultural prominence of Western ways. Our objective was to test if supporting traditional midwives on their own terms increases cultural safety (respect of indigenous traditions) without worsening maternal health outcomes.

APPROACH

Non-inferiority cluster-randomised controlled trial in four indigenous municipalities in Guerrero State, southern Mexico, including all pregnant women in 80 communities. Between 2015 and 2017, traditional midwives and their apprentices received a stipend and support from a trained intercultural broker, and local official health personnel attended a workshop for improving attitudes towards traditional midwifery. Forty communities in two control municipalities continued with usual health services. Outcomes: childbirth and neonatal complications, perinatal deaths, and postnatal complications (primary) and traditional childbirth (at home, in vertical position, with traditional midwife and family) and experience in Western healthcare (secondary)

RESULTS

Among 872 completed pregnancies, women in intervention communities had lower rates of primary outcomes (perinatal deaths or childbirth or neonatal complications) (RD -0.06 95%CI -0.09 to -0.02) and reported more traditional childbirths (RD 0.10 95%CI 0.02 to 0.18). Among institutional childbirths, women from intervention communities reported more traditional management of placenta (RD 0.34 95%CI 0.21 to 0.48) but also more non-traditional cold-water baths (RD 0.10 95%CI 0.02 to 0.19). Among home-based childbirths, women from intervention communities had fewer postpartum complications (RD -0.12 95%CI -0.27 to 0.01).

CONCLUSION

Supporting traditional midwifery increased culturally safe childbirth without worsening health outcomes. The fixed population size restricted our confidence for inference of non-inferiority for mortality outcomes. Traditional midwifery could contribute to safer birth among indigenous communities if, instead of attempting to replace traditional practices, health authorities promoted intercultural dialogue.

115 - Service Engagement in Virtual Early Psychosis Intervention: A Qualitative Study on Patient, Family Member, and Clinician Perspectives

Presenter: Alexandra Sosnowski

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

Early psychosis intervention (EPI) services are the gold-standard for youth with psychosis, although long-term retention remains a challenge. Amid the COVID-19 pandemic, services rapidly transitioned to virtual delivery. There is little research exploring experiences of service users, their families, and clinicians in virtually delivered EPI, including factors hindering or facilitating participation in care. The present study seeks to provide an in-depth account of the impacts of transitioning to a virtual EPI program on service engagement.

APPROACH

The EPI program at the Centre for Addiction and Mental Health (CAMH) transitioned the majority of its services to virtual delivery following COVID-19 mandates. We aimed to recruit patients receiving CAMH EPI services and their family members for individual interviews, and CAMH EPI clinicians for a focus group. Patients and families were purposively sampled across dimensions of engagement (highly vs. poorly engaged) and time in treatment (initiating treatment prior to vs. during the pandemic). Clinicians were sampled to achieve representation across intervention roles. All interviews were conducted using videoconferencing, and were audio-recorded, transcribed, and analyzed using thematic analysis.

RESULTS

This qualitative study is a component of a larger, mixed methods project evaluating the transition to virtual EPI at CAMH. To achieve thematic saturation, individual interviews were conducted with 8 patients and 9 family members, probing service engagement, including experiences with technology and delivery preferences, the therapeutic relationship, and appointment attendance, among other topics. A single focus group was held with 6 clinicians, probing similar themes in the context of clinician experiences providing virtual EPI. Qualitative findings are being analyzed using inductive thematic analysis. Preliminary findings suggest preferences for a hybrid model (i.e., a combination of virtual and in-person care), balancing the advantages and disadvantages inherent to a single care delivery method.

CONCLUSION

To our knowledge, this is the first study to incorporate patient, family member, and clinician perspectives on the virtual delivery of EPI with a focus on service engagement. Results from the present study may help guide the implementation of telemental health for psychosis interventions, both during the pandemic and beyond.

116 - Service recommendations for improving transitions in care for older adults with hip fracture in Ontario, Canada: A qualitative study exploring the perspectives of patients, caregivers, providers and decision-makers

Presenter: Lauren Cadel

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Fall-related injuries, including hip fractures, are common among older adults. Patients with hip fracture often undergo several care transitions post-injury. These transitions are a vulnerable time for patients and families, and despite being identified as challenging, there are limited recommendations on how to improve care transitions. Therefore, the purpose of this study was to explore recommendations for improving care transitions for older adults with hip fracture from the perspectives of patients, caregivers, providers, and decision-makers.

APPROACH

This descriptive qualitative study was part of a larger longitudinal qualitative multiple case study of two diverse health regions in Ontario. Study participants included older adults with hip fracture, caregivers supporting an individual with hip fracture, healthcare providers, and decision-makers. Purposive and snowball sampling methods were used for recruitment. In-depth semi-structured interviews were conducted in-person or by telephone. Patients and caregivers were invited to complete follow-up interviews as they transitioned along their care journey. All interviews were audio-recorded, transcribed verbatim, and analyzed using descriptive and interpretive approaches.

RESULTS

A total of 48 participants, including 15 patients, 15 healthcare providers, 10 caregivers, and 8 decision-makers took part in 66 interviews. We classified the recommendations as hospital-based recommendations; community-based recommendations; and cross-sectoral-based. Hospital-based recommendations included improving communication between hospital providers and between providers and families, increasing staffing levels, and treating patients and families with respect. Community-based recommendations included the early identification of individuals at-risk and increasing primary health care and community-based prevention, as well as educational programs. Cross-sectoral based recommendations were grounded in enhanced system navigation through the introduction of care navigators.

CONCLUSION

The recommendations outlined can potentially improve experiences with care transitions within the hospital, in the community, and across sectors. Community-based integrated care, with primary health care playing a central role, is important for improving care transitions for older adults with hip fracture.

117 - Sex differences in the sequence and burden of comorbidities in persons with dementia: A population-based cohort study in Ontario, Canada.

Presenter: Azmina Artani

THEME: Chronic Disease Management

BACKGROUND AND OBJECTIVES

The management of comorbidities in persons with dementia influences health outcomes and system use and requires a multidisciplinary approach. At present, there is limited information on the burden of comorbidities in persons with dementia in Canada. The aim of this study was to examine differences in the sequencing and prevalence of comorbidities among persons with dementia by sex.

APPROACH

Using health administrative databases from Ontario, Canada, we identified a cohort of 152,988 individuals with prevalent dementia aged 65 years and older on April 1, 2015 and followed them until March 31, 2020. We characterized the prevalence and date of onset of comorbidities relative to dementia case ascertainment according to Canadian Chronic Disease Surveillance System definitions. The comorbidities included hypertension, diabetes, traumatic brain injury, stroke, ischemic heart disease, congestive heart failure, parkinsonism, and health service use for mental illness (including alcohol or drug induced disorders). We compared the burden of comorbidities by sex using standardized differences (SD).

RESULTS

We identified 97,094 females and 55,894 males with dementia; females were older than males (mean 84.3 vs. 81.6 years) and were more likely to reside in a long-term care facility (44.3% vs. 32.7%). At index, individual comorbidities were more common in males such as ischemic heart disease (50.0% vs. 40.6%, SD: 0.19), diabetes (38.5% vs. 30.9%, SD: 0.16), stroke (31.8% vs. 26.1%, SD: 0.13) and parkinsonism (8.1% vs. 4.0%, SD: 0.18), while females were more likely to have 5 or more concurrent conditions (55.7% vs. 48.8%, SD: 0.14). Males were more likely to have had diabetes (33.1% vs. 26.0%, SD: 0.16), stroke (25.4% vs. 20.0%, SD: 0.13), ischemic heart disease (44.3% vs. 35.2%, SD: 0.19) and parkinsonism (5.4% vs. 2.8%, SD: 0.13) prior to dementia.

CONCLUSION

We observed sex differences in the prevalence of specific comorbidities among persons with dementia, including a generally higher burden of cardiovascular comorbidities in males and a higher burden of overall comorbidity in females. Males and females with dementia would benefit from receiving multidisciplinary care to manage dementia with other comorbidities.

118 - Sex-based differences in the relationship between loneliness and prevalent polypharmacy in older adults in Ontario

Presenter: James Im

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

Older adults, especially women, experience high rates of loneliness compared to other groups and are among the largest consumers of medication. Our aim was to explore sex-based differences in the potential association between loneliness and polypharmacy.

APPROACH

We assembled a cross-sectional cohort of community dwelling older adults aged 66+ years based on the 2008/2009 Canadian Community Health Survey (CCHS) - Healthy Aging cycle linked to health administrative data in Ontario, Canada. Loneliness was measured using the Three-Item Loneliness Scale and categorized as not lonely, moderately lonely, and severely lonely. Polypharmacy was measured using prescription medication claims and defined as five or more unique medications on the participant's interview date. Multivariable logistic regression was used to estimate odds ratios (OR) for the association between loneliness and polypharmacy, stratified by sex.

RESULTS

Our sample included 2,359 CCHS respondents which corresponded to 1,200,048 individuals following weighting. Women comprised 54.6% of the weighted sample. 32.3% of not lonely women (32.5% of not lonely men), 36.5% of moderately lonely women (32.2% of moderately lonely men), and 44.1% of severely lonely women (42.4% of severely lonely men) were using five or more medications. Severe loneliness was significantly associated with higher odds of polypharmacy (adjusted OR = 1.65, 95% CI: 1.06-2.58) among women but not among men (adjusted OR = 1.18, 95% CI: 0.70-2.00), following adjustment for confounding variables.

CONCLUSION

Higher levels of loneliness were significantly associated with polypharmacy among women. Furthermore, the number of medications differed across loneliness categories for women and men. Our results indicate the importance for clinicians to consider loneliness in their prescribing practices.

119 - Short-Term Effects of Recreational Cannabis Legalization on Youth Cannabis Initiation

Presenter: Shweta Mital

THEME: Health Policy, Healthcare Reform (includes priority setting, politics)

BACKGROUND AND OBJECTIVES

There have been extensive debates on the impacts of Canada's recreational cannabis legalization and the accompanying MLA law on cannabis use among youths. While legalization can increase youths' availability of legal cannabis and reduce perceptions of harm, it is expected that the MLA law will prevent underage youths from accessing cannabis and thus reduce cannabis initiation. Existing research generates conflicting results and does not shed light on mechanisms of effects. This study investigates the impacts of legalization on youths' cannabis initiation and overall cannabis use prevalence.

APPROACH

We used interrupted time series design and data from nationally-representative repeated cross-sectional Canadian surveys spanning 16 years. Primary outcomes are cannabis initiation rates and cannabis use prevalence among youths. Secondary outcomes are self-reported age of first cannabis use, ease of cannabis access and perception of cannabis harm.

RESULTS

After the legalization, cannabis initiation rate among youths was 2.7 percentage points ($p<0.01$) or 69% higher, although there was no significant increase in the overall prevalence of cannabis use. Furthermore, there was a 4-month delay in average age of first cannabis use among youths aged 17-18 ($p<0.01$). The legalization was associated with easier access to cannabis but also greater perception of cannabis harm.

CONCLUSION

The impacts of the legalization on youth cannabis use after one year are mixed. While we observed an increase in cannabis initiation among youths who had never used cannabis, there was no change in the overall prevalence of cannabis use, implying an offsetting increase in cannabis cessation among existing users. To achieve the legalization's goal of reducing youths' cannabis use, policy measures are needed to curb youths' cannabis access and initiation.

120 - Sick day medication guidance for people with diabetes, kidney, or cardiovascular disease: A scoping review

Presenter: Ella McMurtry

THEME: Chronic Disease Management

BACKGROUND AND OBJECTIVES

Sick day medication guidance (SDMG) has been promoted to prevent adverse drug reactions during times of acute illness for people using medications for chronic conditions (i.e., diabetes mellitus, kidney, and cardiovascular disease). Our objective was to summarize the depth and breadth of the literature for SDMG for people with diabetes, kidney, or cardiovascular disease.

APPROACH

We systematically searched six databases (Ovid MEDLINE, Ovid Embase, CINAHL, Scopus, Web of Science Core Collection, and Cochrane Library) and completed a comprehensive grey literature search of publicly accessible professional organizations' guidelines and educational material. The searches were conducted in June 2021 by a medical librarian. Data collection included article type, characteristics of recommendations, medications included, education, and self-management strategies specified, and descriptions of interventions.

RESULTS

The literature search identified 1,562 citations from databases and 746 documents from grey literature sources. Screening led to the retrieval of 237 full-text documents, of which 74 met eligibility criteria for inclusion. The majority (n=55) of the identified documents were guidelines or educational resources with under half (n=28) being documents designed for use by patients. Of the 19 primary research studies, 5 were surveys, 2 were usability studies, and 3 were randomized control trials of interventions. Of the 19 research studies, only 10 described an intervention; 2 tested the effect of sick day medication interventions within clinical care, 5 tested the effect of educational interventions on patient knowledge, 2 evaluated patient telephone support, and 1 compared methods of ketone monitoring. Most documents (n=58) included guidance specific to patients with diabetes mellitus with few including guidance for patients with chronic kidney disease (n=9) or heart failure (n=2).

CONCLUSION

Many resources promoting SDMG have been developed, but there is very little evidence for the effectiveness of current approaches for implementing SDMG into practice. Recommendations for use of SDMG will require further research to develop consistent, understandable, and usable approaches for its implementation within self-management strategies, as well as empiric studies to demonstrate the effectiveness of these interventions.

121 - Sick Day Medication Guidance: An Investigation of Patient and Healthcare Provider Experiences

Presenter: David J.T. Campbell

THEME: Chronic Disease Management

BACKGROUND AND OBJECTIVES

People with chronic health conditions (i.e., diabetes mellitus, heart disease, kidney disease) often take medications that protect them from complications. Some of these medications can cause harm during acute dehydrating illnesses. Various guidelines recommend that healthcare providers (HCP) offer instruction to temporarily stop these medications during these illnesses, yet many people do not receive this instruction or remember it. We explored patient experiences with sick day medication guidance (SDMG) and HCP experiences providing SDMG.

APPROACH

We used a qualitative description approach. We purposively sampled among eligible patients and HCPs from numerous sources across Canada. These sources included social media, university affiliations and websites, specialist and family physician practice settings, pharmacies, and other national and provincial organizations. Data was collected using virtual focus groups (patients and pharmacists) and individual interviews (patients and physicians) via Zoom. NVivo software was used to manage data. Transcripts were analyzed using conventional qualitative content analysis by two team members to develop themes.

RESULTS

Our analysis revealed 4 themes regarding SDMG from patients' perspectives: 1) Variable self-management practices (e.g., blood glucose monitoring increases during acute illness, stopping or not stopping medications); 2) HCP interactions (e.g., connecting in person or virtually with HCPs when unwell, having regular access to multidisciplinary support); 3) Lack of SDMG knowledge; and 4) Desire for resources to help support SDMG. Our analysis also revealed 3 common themes regarding SDMG from HCP perspectives: 1) Disjointed communication with patients and among other HCPs; 2) Patient factors impacting SDMG (e.g., patient expectations and health literacy); and 3) Provider factors impacting SDMG such as familiarity with and use of resources and workload concerns.

CONCLUSION

Patients engage in varying SDMG practices and connect with HCPs as needed during sick days. They report a lack of SDMG knowledge but a desire for resources to follow this guidance. Various patient and HCP factors impact the provision and uptake of SDMG and require consideration for intervention development.

122 - Social Inequalities in Aging in Place Among Older Adults in OECD Settings: A Mixed Studies Systematic Review

Presenter: Clara Bolster-Foucault

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

Most older adults wish to remain in their homes rather than transition to long-term care facilities. However, certain populations may face greater heath- and care-related barriers in doing so. We aim to (1) synthesize evidence of social inequalities in the ability to age in place among older adults living in high-income country members of the Organisation for Economic Co-operation and Development (OECD) and (2) examine how these inequalities are defined and measured in the literature.

APPROACH

We are conducting a mixed studies systematic literature review. To identify relevant works, we are searching Medline, Embase, PsycINFO, CINAHL, and Web of Science for peer-reviewed publications that examine social inequalities in aging in place or transition to long-term care facilities among adults aged 65 and older. We are including empirical quantitative (observational and interventional) and qualitative studies published in English or French. We will extract data relating to variables reflecting social identities or positions (data source, operational definition), methodology used to measure inequalities, and main results (effect measures for quantitative studies, themes for qualitative studies).

RESULTS

Results of selected works will be synthesized using a convergent synthesis design following a narrative approach. The synthesis will be guided by the PROGRESS-Plus framework for health equity research, which outlines key socially stratifying factors that influence social inequalities in health across the lifespan, including place of residence, race/ethnicity, occupation, gender, religion, education, socioeconomic position, and social capital, plus emergent context-specific factors (e.g. disability, sexual orientation). We will document the presence, magnitude, and determinants of inequalities in aging in place along each of these social dimensions. In addition, to guide future researchers examining aging in place in population health research, we will summarize the range of methods used to define, identify, and quantify these social inequalities.

CONCLUSION

This knowledge synthesis will contribute to a more comprehensive understanding of the social forces that create inequity in the ability to age in place among certain populations and provide an overview of how inequalities in aging in place have been defined and measured in the literature.

123 - Structural Interventions to Reduce Harms & Promote the Capabilities of Girls Experiencing Multiple Complexities

Presenter: Andrea Mellor

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

This paper seeks to better understand the intersecting societal factors that influence the prevalence of critical injuries and other harms (i.e., complexities) experienced by cis-girls/young women (i.e., girls) who come to the attention of the British Columbia (BC) Representative for Children and Youth (RCY). The objective is to identify effective structural interventions from around the globe at the individual, system, and environment levels, that promote and develop the capabilities of girls.

APPROACH

We approached this work guided by child and youth care scholar Cindy Blackstock's 'Breath of Life' theory, which assumes diverse human experiences are related to the structural contexts that shape individual realities, and that these affect the safety and well-being of young people. We conducted a scoping review grounded in the Breath of Life approach to identify peer-reviewed qualitative and quantitative research that described structural interventions focused on improving the wellbeing of children and youth, Our criteria for article inclusion consisted of English language articles that provide a description of a structural intervention, its implementation, and an evaluation of its outcomes.

RESULTS

Our paper describes some of the main structural factors that create complexity for socially disadvantaged girls, which can predispose them to elevated risks that may trigger their involvement with government services, including mental health services and the youth justice and child welfare systems. We discuss macro-level risks that are largely beyond the ability of children and families to control and may include intersecting dimensions of colonialism, geography, gender, and stigma. We then describe structural interventions from across the globe that have implemented programming, tools, and/or policies that strive for improved equitable, accessible, and socially just services that address complexity.

CONCLUSION

Our findings contribute to an improved understanding of trauma-informed and culturally appropriate structural interventions that can address complexities in the lives of girls that result in injury and/or death. This work will inform ways that policy makers can support improved access to equitable, inclusive, culturally safe, and adaptable services for this marginalized group.

124 - Supporting MRT Mental Health

Presenter: Melissa Corrente

THEME: COVID-19

BACKGROUND AND OBJECTIVES

The COVID-19 pandemic has had an exceptional impact on the healthcare profession, and in particular, on the mental health and wellbeing of healthcare workers. The Canadian Association of Medical Radiation Technologists (CAMRT) has been working on ways to prioritize the mental health of their members. MRTs need to feel supported individually, organizationally and in society. The goal of this paper is to offer a variety of recommendations to support MRT mental health in Canada.

APPROACH

This exploratory qualitative study was conducted in 2021 and employed semi-structured interviews with four MRTs and four stakeholders along with one focus group comprised of seven participants. Interviews were conducted with members from each of the four disciplines. MRTs were recruited through CAMRT's communication channels. A semi-structured open-ended protocol for both the focus groups and interviews was developed by team members with experience in qualitative research, mental health, and medical radiation technology. This structure allowed for the systematic collection of data and comparability of responses. Focus group and interview data was analyzed using Braun and Clarke's method of thematic analysis.

RESULTS

Support for MRTs has been divided into three levels; policy, organizational and individual. The policy level is intentionally being presented first to highlight the importance of broader level changes and their potential impact on MRT mental health. MRTs felt their identity was damaged by the government's decision not to recognize them as frontline workers. This decision negatively affected MRTs professional identity and created levels of importance within the healthcare environment. From an organizational perspective, MRTs highlighted their desire for recognition as an organization along with mental health supports that are targeted, timely and easy to access. On an individual level, MRTs discussed isolation at length and focused on their relationships at work and how COVID affected their support systems.

CONCLUSION

The mental health crisis in healthcare will continue beyond COVID-19 without positive changes. Each level of influence needs to work together in order to create meaningful change. MRTs can engage with individual level supports but the healthcare system needs to change. Mental health is a journey not a destination.

125 - Telehealth case management in primary care: an innovation in response to services disruption for patients with complex needs

Presenter: Charlotte Schwarz

THEME: Primary Healthcare

BACKGROUND AND OBJECTIVES

Case management (CM) is an intervention that can be effectively adapted to individuals with complex care needs. The COVID-19 pandemic has exacerbated disruptions in care, especially for vulnerable patients. Telehealth CM (TCM) can be a useful tool in facilitating the implementation of CM in the pandemic environment. However, few qualitative studies examine experiences with TCM. This study aims to identify the contextual elements that influenced the implementation of TCM.

APPROACH

We conducted a qualitative descriptive study in Canadian primary care clinics implementing TCM (NS, NB and NL). The intervention was led by nurse case managers and included four main components: 1) patient needs assessment; 2) care planning, including individual services plan; 3) care coordination; and 4) self-management support. The data were collected through semi-structured individual and group interviews with patients, case managers, providers, and clinic managers after three months of participation in TCM (telephone, video, email). Data from interviews with 29 patients, 3 nurse case managers, 6 providers, 1 manager, and 1 focus group (n= 3 providers) were analyzed thematically.

RESULTS

Patients and case managers note that TCM may increase convenience and accessibility for patients; save time for patients and providers; and allow for more regular contact between patient and provider. However, it was noted that TCM can make it difficult for nurse case managers to notice physical cues, and certain health and social issues can be difficult to address virtually. Face-to-face meetings were reported to be most important at the outset of the CM intervention to discuss complex circumstances and needs, and to develop trust before moving to primarily telehealth appointments. Contextual factors within the clinic which helped facilitate implementation include the presence of a skilled nurse case manager; existing TCM infrastructure and usage; and patient experience and comfort with telehealth modes of care delivery.

CONCLUSION

This study builds on current TCM literature by capturing the perspectives of nurse case managers, patients, and other healthcare providers with ongoing experiences of TCM and offering insight into contextual factors that facilitate or hinder the implementation of TCM.

126 - The association between prior mental health service utilization and risk of recidivism among incarcerated Ontario residents

Presenter: Michael Lebenbaum

THEME: Mental Health and Addictions

BACKGROUND AND OBJECTIVES

There is mixed evidence on the link between mental health and addictions (MHA) history and recidivism. Few studies have examined post-release MHA care. Our objective was to examine the association between prior (pre-incarceration) MHA service use and post-release recidivism and service use.

APPROACH

We conducted a population-based cohort study linking individuals held in provincial correctional institutions in 2010 to health administrative databases. Prior MHA service use was assigned hierarchically in order of hospitalization, emergency department visit and outpatient visit. We followed up individuals post-release for up to 5 years for the first occurrence of recidivism and MHA hospitalization, emergency department visit and outpatient visit. We use Cox-proportional hazards models to examine the association between prior MHA service use and each outcome adjusting for prior correctional involvement and demographic characteristics.

RESULTS

Among a sample consisting of 45,890 individuals, we found that prior MHA service use was moderately associated with recidivism (Hazard Ratio (HR) range: 1.20-1.50, all $p<0.001$), with secondary analyses finding larger associations for addictions service use (HR range: 1.34-1.54, all $p<0.001$) than for mental health service use (HR range: 1.09-1.18, all $p<0.001$). We found high levels of post-release MHA hospitalization and low levels of outpatient MHA care relative to need even among individuals with prior MHA hospitalization.

CONCLUSION

Despite a high risk of recidivism and acute MHA utilization post-release, we found low access to MHA outpatient care, highlighting the necessity for greater efforts to facilitate access to care and care integration for individuals with mental health needs in correctional facilities.

127 - The Cost of Drug Shortages for Canadian Insurers

Presenter: Étienne Gaudette

THEME: Health Economics/Financing/Funding (including cost and economic analysis)

BACKGROUND AND OBJECTIVES

Drug shortages are an issue of great importance to the full range of Canadians they affect, from patients to healthcare providers, pharmacists, and insurers. Because they can be associated with decreases in quantities sold, price changes, and substitutions to pricier alternatives, the net effect of shortages on insurer spending is not immediately evident. This study aims to shed light on these effects by studying how public drug spending changes when drugs go into shortage.

APPROACH

The study analyzes prescription drug shortage reports from the Drug Shortages Canada website and claims data from public drug plans affiliated with the National Prescription Drug Utilization Information System (NPDUIS) initiative from April 2017 to March 2020. Using this information, which accounts for approximately 7 million active beneficiaries insured by a public plan, changes in the unit price of drugs and plan spending during shortages are documented relative to a six-month period preceding the shortage.

RESULTS

A total of 4,858 shortages reported during the study period could be matched with NPDUIS claims prior to and during the shortage. About one in five shortages (22%) was accompanied by a price increase for the drug. In 65% of cases, spending for the drug in shortage declined; 43% of cases showed a decline greater than 20% of pre-shortage spending. When taking into account the substitutions to other drugs within the same chemical group, less than a quarter of shortages (19%) resulted in a shift in spending greater than 20%. For cases where there was a significant shift in expenditures, shortages were associated with spending decreases as often as increases (9% and 10% of shortages, respectively).

CONCLUSION

While the harmful impact of drug shortages on patients and the health care system is well documented, this study finds that most shortages do not significantly disrupt spending patterns for public insurers.

128 - The COVID-19 Pipeline: Vaccines and Treatments on the Horizon

Presenter: Allison Carey

THEME: COVID-19

BACKGROUND AND OBJECTIVES

Development of new and repurposed medicines in response to the COVID-19 pandemic has occurred at an unprecedented scale and rate, resulting in a dynamic pipeline marked by significant challenges and successes. This analysis provides an overview of the vaccines and therapies undergoing clinical evaluation or with recent approval for the treatment and prevention of the novel coronavirus in Canadian and global markets.

APPROACH

For the purposes of this analysis, pipeline medicines are defined in three main categories: vaccines, which are used to prevent infection of the novel coronavirus; new COVID-19 treatments, which are new medicines used for the prevention or reduction of complications; and repurposed medicines, which were originally approved for different indications and are now used to treat COVID-19 or its symptoms. GlobalData is the primary source of data used for this study, in addition to online databases from Health Canada, the US FDA, and the EMA. International markets examined include the US and geographic Europe (excluding Russia and Turkey).

RESULTS

As of December 2021, there were over 700 vaccines and therapies reported as undergoing Phase I, II, III clinical trials or preregistration for the prevention and treatment of COVID-19 globally. Preventive and repurposed medicines include antivirals, immunoglobulins, monoclonal antibodies, cellular therapies, and convalescent plasma. In Canada, there are currently eight medicines, including four vaccines, that have been approved for COVID-19. The number of global approvals is greater, with approximately 15 vaccines on the market in OECD countries.

CONCLUSION

This research provides a clearer picture of the characteristics and evolution of the market for new and emerging COVID-19 medicines, which will enable policy-makers and other stakeholders to better understand and anticipate the unique pressures posed by the COVID-19 pandemic.

129 - The financial risks of unpaid homebased caregiving during the COVID-19 pandemic: Results from a self-reported survey in Ontario

Presenter: Husayn Marani

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

Despite their economic contributions to the health system through their unpaid labour, little is known about the expenses unpaid caregivers incur in the provision of homebased care, and particularly, the consequences of care-related expenditure on their financial well-being. We aimed to typify self-reported, out-of-pocket homecare expenditure among unpaid caregivers in Ontario, and characterize patterns of financial risk associated with the COVID-19 pandemic across domains such as caregiver income, productivity and health.

APPROACH

In a consultative process with volunteer caregivers, we developed an online, cross-sectional survey based on validated instruments and original questions. The survey was conducted between August and December 2020. Results were analyzed descriptively using SPSS.

RESULTS

Among 190 caregivers who completed the survey, the average age was 57.8 and 87.4% were female-identifying. Frailty and dementia were the most commonly reported health conditions among care recipients. Caregivers incurred several care expenses out-of-pocket, largely for medications, COVID-19 protection, renovations and paid homecare (the latter two being the highest expense categories). Concerning financial risk, caregivers found it more difficult to pay for care expenses after the pandemic was declared ($p=0.000$), and more caregivers retired or become unemployed during the pandemic than before ($p=0.013$). Overall, the financial stressors of caregiving during the pandemic have contributed negatively to caregivers’ mental health, which 64.2% of caregivers note could be partly offset by greater government and employment-based assistance in managing care expenses and productivity losses.

CONCLUSION

The COVID-19 pandemic has exacerbated challenges in caregiving, including the financial challenges. A fulsome understanding of caregivers’ financial well-being will better inform policies and programs that aim to protect unpaid caregivers from the financial risks of caring in COVID-19 recovery efforts.

130 - The influence of policy and social context on TB education and counseling for patients and family members who are foreign-born in Calgary

Presenter: Nancy Bedingfield

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Tuberculosis (TB) education and counselling often fails to address patient and family members' need for information and support. Health policy and social context are powerful determinants of practice; yet little is known about how these factors influence TB education and counselling in settings where linguistic and cultural dissonance between patients and providers is common. The purpose of this study was to identify elements of health policy and social context which influence TB education and counselling.

APPROACH

This study formed one component of a qualitative case study framed according to the socioecological model. Data for the study were collected in Calgary through analysis of 25 documents and 49 semi-structured interviews conducted with patients, family members, TB health care workers, and leaders in health services and immigrant serving organizations. Purposive sampling was used to gather relevant documents and participants with varied experiences. Content analysis was used for document review and thematic analysis was used for interview data. Results were integrated using framework analysis.

RESULTS

Three dimensions of health policy and social context were generated from the data: adverse social determinants of health for people who are foreign-born; alternative institutional priorities; and weak connections to external partners. Participants observed that these dimensions negatively impacted education and counselling through reduced opportunities for interaction, low prioritization of education and counselling, and confusion when referring outside of the clinic. However, within each dimension, participants noted promising developments, several related to the COVID-19 pandemic, that increased attention for the health needs of people who are foreign-born. Participants suggested that advances such as increased use of video appointments and cultural brokers could support future innovation in TB education and counselling.

CONCLUSION

Contextual barriers to innovation in TB education and counselling for people who are foreign-born are prominent. Stronger connections to local immigrant serving organizations and a clearer articulation of optimal TB education and counseling would facilitate positive change. Advocates could capitalize on recent developments to garner additional resources.

131 - The physician and patient contribution to the alliance-outcome correlation in diabetes type 2 patients in primary care

Presenter: Kyla Lee

THEME: Primary Healthcare

BACKGROUND AND OBJECTIVES

A strong physician-patient relationship, or working alliance, fosters effective healthcare. It is particularly important for patients in primary care with chronic disorders, with those reporting stronger alliances also reporting better treatment adherence. Although in psychotherapy, therapist variability in alliance predicts treatment adherence, it is not yet known whether a similar effect exists in primary care. Thus, we aim to determine the physician and patient contribution to the alliance-outcome correlation in primary care.

APPROACH

Patients with Diabetes type 2 from a primary care clinic in Toronto will be recruited and complete the Working Alliance Inventory for General Practice (WAI-GP) to measure the working alliance. Primary outcome will be treatment adherence measured by medication possession ratio with a denominator of analysis period. Physician variability in alliance will be the degree to which the physician’s mean WAI-GP deviates from the WAI-GP grand mean. Patient variability will be patient WAI-GP deviation from their physician’s WAI-GP score. A multilevel model will be used, with physicians modeled as a random factor.

RESULTS

As this study is still in progress, it is hypothesized that the alliance and treatment adherence will have a significant positive correlation. Further, it is hypothesized that physician variability in alliance will predict treatment adherence for patients. The anticipated results of this study will help to better understand how best to support physicians who have patients who are less compliant to treatment in Diabetes type 2. Physicians may benefit from regularly monitoring their alliance with their patients in order to increase treatment adherence. Our findings would also contribute to better defining and understanding how to achieve stronger physician-patient relationships, or the working alliance, in order to better patient health outcomes.

CONCLUSION

To our knowledge, this study is the first to investigate physician and patient contributions to the alliance-outcome correlation. Findings can inform future research to determine whether this physician effect is seen in different populations of patients and primary care model settings.

132 - The Reality of Rurality

Presenter: Grace Spiro

THEME: Health Policy, Healthcare Reform (includes priority setting, politics)

BACKGROUND AND OBJECTIVES

The terms rural and remote remain elusive to define. For geography to be considered as a health equity stratifier in a health research context, some consensus must be reached in defining and categorizing areas based on rurality. This study sought to operationalize a rurality measurement approach for Northern Ontario by comparing two methods of rurality classification, Statistical Area Classification and the Remoteness Index, while also considering the various methodological approaches of categorization.

APPROACH

Despite its widespread use, Statistical Area Classification (SAC) remains limited by its inability to distinguish between rural and remote areas and its primary reliance on population size. In response, the Remoteness Index (RI) was developed to measure relative remoteness and considers the impact of travel burden alongside population size. Previous work has identified a variety of approaches to categorizing the continuous RI values – ranging from 0 to 1 – into meaningful groups. The three suggested RI categorization approaches, in each of their potential configurations, were compared alongside the SAC approach.

RESULTS

All the 275 Northern Ontario Census Subdivisions (CSDs) were categorized using each of the seven rurality classification approaches. Chi-squared tests for independence were used to assess the level of association between all classification methods. There was no statistically significant association found between SAC type and the RI in any of its categorizations or configurations. There were, however, statistically significant associations of medium effect size found between various RI categorization and configuration approaches. Furthermore, geographic information system (GIS) maps were developed for all seven approaches to visualize the urban/rural designation. These maps highlighted potential over classification of urban zones when certain configuration approaches were employed.

CONCLUSION

Securing a reliable and valid measure of rurality by place of residence is a crucial baseline achievement towards combatting geographically based health inequities. An ideal measure would allow for within and between-group comparison; allow for both a distinguished rural/remote divide and the ability to condense to a dichotomous measure.

133 - The role of Canadian family physicians in the early response to the COVID-19 pandemic

Presenter: Alix Holtby

THEME: COVID-19

BACKGROUND AND OBJECTIVES

In Canada, most medical care is delivered through front line, first contact primary care. As nations traverse the most significant health event in a century, it is important to understand how primary care has been engaged in the challenge. This presentation seeks to assess the patterns of direct clinical patient care involvement of Canadian family physicians (FPs) in the early response to the COVID-19 pandemic by province, age, remuneration model, and practice setting.

APPROACH

An online self-report survey was administered over four weeks in April-May, 2021. Personalized survey invitations were sent via email, with two reminders following initial contact. Most FPs in Canada are the College of Family Physicians of Canada (CFPC) members; 39,991 FPs received survey invitations; 3,409 replied, for an overall response rate of 9%.

RESULTS

Almost all FPs (99%) were in some way involved in the COVID-19 response. Most FPs (77%) were involved in direct clinical patient care (eg vaccination, testing, and/or caring for COVID-19 patients). In particular, 54% cared for COVID-19 patients and 15% vaccinated patients at their practice.

Older FPs, FPs receiving remuneration only via fee-for-service, and FPs practicing in family medicine clinics only were less likely to be involved in the COVID-19 response. The findings also vary across jurisdiction.

CONCLUSION

While most family physicians have been involved in the COVID-19 response, discrepancies exist across jurisdiction, ages, remuneration types, and practice models. These results suggest that there were obstacles to the full involvement of Canada’s primary care system in the response to the pandemic.

134 - The Role of Primary Care in the COVID-19 Vaccine Rollout: A Rapid Review of 9 Jurisdictions

Presenter: Monica Aggarwal

THEME: COVID-19

BACKGROUND AND OBJECTIVES

There are significant concerns about vaccine hesitancy and the equitable distribution of the COVID-19 vaccines. The inclusion of first-contact primary care providers in the vaccine distribution is one approach that can increase vaccine confidence and adoption. The aim of this study was to examine the experience of nine global jurisdictions that engaged primary care providers to administer COVID-19 vaccines during the pandemic.

APPROACH

A rapid review methodology was adopted. Searches took place in MEDLINE, CINAHL, the Cochrane Library, SCOPUS and PsychINFO, Google, and the websites of national health departments. Searches and analyses took place from May 2021 to July 2021. Inclusion criteria were: previously identified jurisdictions focused on COVID-19, referred to the role of primary care, published from January 2020 to July 2021 and in English. Data were extracted based upon study characteristics (e.g., study design) and research questions (e.g., role of primary care, vaccine strategy change over time). The findings were synthesized and reported narratively.

RESULTS

Sixty-four documents met the inclusion criteria. This review found that the vaccine distribution approach started at hospitals in almost all jurisdictions. In some jurisdictions, primary care providers were engaged at the beginning, and the majority included primary care providers over time. Vaccine hesitancy was not explicitly considered in the selection of vaccine distribution approaches. Support to primary care providers was provided through education and training, financial incentives, and organizational support. The barriers to the rollout of the vaccines included individual, organizational and system-level factors. Empirical evidence is lacking on the impact of a primary care-led vaccine distribution approach on vaccine hesitancy, adoption, and equity.

CONCLUSION

Globally, the primary care workforce had an essential role in administering vaccines during the COVID-19 pandemic. Future vaccine distribution approaches need to be informed by evaluating vaccine distribution approaches and their impact on patient and population outcomes.

135 - The Shadow Pandemic: The impacts of COVID-19 on Service Providers and Women Survivors of Intimate Partner Violence and Brain Injury

Presenter: Danielle Toccalino

THEME: COVID-19

BACKGROUND AND OBJECTIVES

Intimate partner violence (IPV) affects 1 in 3 women over their lifetime and has intensified during the COVID-19 pandemic. Although most injuries are to the head, face and neck, leaving survivors vulnerable to brain injury (BI) the intersection of IPV and BI (IPV-BI) remains largely unrecognized. Here we report on unexplored COVID-19-related impacts on service providers and women survivors of IPV-BI.

APPROACH

This project used a qualitative, participatory approach using semi-structured individual or group interviews. Purposeful sampling through the team's national Knowledge-to-Practice Network and snowball sampling were used to recruit 24 participants across four categories: survivors, executive directors/managers of organizations serving survivors, direct service providers, and employer/union representatives. Interviews were conducted via videoconference, audio recorded, and transcribed. Transcripts were thematically analyzed by the research team.

RESULTS

COVID-19 has increased rates and severity of IPV and barriers to services, both in terms of provision and uptake. Three main themes emerged: (1) Implications for Women Survivors of IPV/TBI; (2) Implications for service delivery and service providers supporting women survivors of IPV/TBI; and (3) Key Priorities. Increased risk, complex challenges to mental health, and the impact on employment were discussed. Adaptability and flexibility of service delivery was identified as a significant issue and increased outreach and adaptation of technology-based services were noted as key priorities.

CONCLUSION

The COVID-19 pandemic has intensified IPV-BI, increased challenges for women survivors and service providers, and accentuated the continued lack of IPV-BI awareness. Recommendations for service delivery and uptake are discussed. Published findings of this research can be found here: http://doi.org/10.1097/HTR.0000000000000751

136 - The single site policy: Impact on long term care homes in British Columbia

Presenter: Farinaz Havaei

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

Canadian long-term care (LTC) homes have been the epicenter of COVID-19. To stop the virus spread, and to ensure safety, a series of pandemic management policies were introduced in LTC including the “single site” staffing policy. This policy prohibited LTC staff from employment in more than one care home. The purpose of this study is to evaluate the implementation and impact of the “single site” policy on LTC residents.

APPROACH

This is an exploratory mixed-method study among four LTCs in British Columbia. Interviews were conducted with a purposeful sample of 2-4 executive leaders per LTC (n=10), and focus groups/interviews were conducted with 3-5 staff per LTC (n= 18). Aggregated, quarterly staffing data (e.g., overtime, turnover), representing four quarters pre and four quarters during the pandemic (Apr 2019-Mar 2020), were obtained from each LTC or their respective health authority. Content analysis was used to analyze qualitative data. Quantitative staffing data were analyzed using descriptive data visualization methods with an overall linear trend slope based on a least square method.

RESULTS

Qualitative data showed key impacts on LTC homes included increased costs (human resources, paying for sick leave, losing casual pool and posting positions as temporary), staffing shortages, heavy workloads and loss of volunteer hours. Care homes worked internally to offset these negative impacts through enhancing communication with staff and utilizing contingency funds. Quantitative data pointed to increasing challenges in relation to adequate staffing. Most notably, compared to pre-pandemic, an increasing trend in overtime rate was found during the pandemic, with the greatest rise in overtime belonging to registered nurses. An increasing trend was also noted in registered nurses’ rate of voluntary turnover during the pandemic compared to pre-pandemic.

CONCLUSION

While these outcomes cannot be solely attributed to the single site policy, due to the concurrent implementation of multiple policies, findings showed homes were not well supported in the process of the single site policy implementation resulting in the utilization of contingency funds, staffing shortages and increased overtime and burnout.

137 - The validity of electronic health databases for measuring smoking status: A scoping review

Presenter: Ashiqul Haque

THEME: Health Informatics

BACKGROUND AND OBJECTIVES

Smoking is a risk factor for many chronic diseases. Population-based electronic health databases, such as administrative databases, do not directly capture smoking information. However, many smoking status algorithms based on smoking-related health conditions have been developed for these databases. Our aim was to conduct a scoping review of smoking status algorithms developed from electronic health databases and describe the characteristics and validity of these algorithms.

APPROACH

The five-step Arksey and O'Malley framework for systematic reviews was adopted. We searched for articles published from 1990 to 2021 in MEDLINE, Scopus, and Web of Science with key terms such as validity, administrative data, electronic medical records (EMRs), smoking, and tobacco use. Abstracts were reviewed by two co-authors for decisions about study inclusion/exclusion. The extracted information included article characteristics (e.g., country of data origin, publication year, years and geographical source of study data), algorithm characteristics (e.g., data structure, data source, implemented techniques), and features of algorithm validation (e.g., type of reference data, accuracy measures). Study data were descriptively analyzed.

RESULTS

The initial search resulted in 513 articles; 27 were selected for full review. Most articles were published in 2016-2021 and used US data from a single state or organization. A total of 65 algorithms were identified; 52 were based on EMR data and 13 were based on administrative data. The algorithms were primarily constructed using diagnosis codes for smoking-related conditions; prescription drug dispensations and physician service codes were also used. About half of the algorithms were developed using machine-learning models. Sensitivity, specificity, and accuracy of the algorithms were highly variable and ranged from 9%-100%, 58%-100%, and 42%-98%, respectively. Overall, EMR-based algorithms that relied on both structured and unstructured text data had the highest validity; administrative data-based algorithms based solely on diagnosis codes had low validity.

CONCLUSION

Several algorithms using different data sources and construction techniques have been proposed to ascertain smoking status in electronic health databases. While algorithm validity is influenced by the data source, many algorithms have low sensitivity and accuracy. Future research could develop new algorithms by linking multiple databases that contain smoking-related information.

138 - Trajectories of healthcare engagement and associated factors over the duration of the COVID-19 pandemic: a mixed-methods study

Presenter: Andreas Pilarinos

THEME: Indigenous Health

BACKGROUND AND OBJECTIVES

The COVID-19 pandemic has had significant impacts on health care engagement, mental health, and substance use of the general population in Canada; however, less is known about the impacts of the pandemic on the health of Indigenous peoples. Given this knowledge gap, this study sought to understand health care engagement trajectories and the impacts of service reduction on the mental health and substance use among Indigenous peoples.

APPROACH

We employed a mixed-methods design to understand changes in health care engagement, mental health, and substance use in Vancouver Community, which is the municipal boundary of Vancouver, Canada, from before to after the onset of the COVID-19 pandemic. A latent trajectory analysis using Indigenous patients' health care data allowed for the examination of health care engagement over time and associated factors. Qualitative analysis of expert interviews with community leaders and an online survey with frontline health care workers provided a more nuanced understanding of the impacts of the pandemic on mental health and substance use.

RESULTS

Latent trajectory modeling yielded four healthcare engagement trajectories, including: high healthcare need (n=1,660, 63.2%); pre-pandemic increasing healthcare need (n=73, 2.78%); post-pandemic increasing health care need (n=37, 1.4%); and low healthcare need (n=856, 32.6%). Mental health and substance use-related factors were found to be positively associated with increasing health care need, which complemented qualitative findings of the impacts of the pandemic on front line services and supports. More specifically, community members and frontline workers identified the closure and reduction of cultural, health, and social services was detrimental to the health and well-being of Indigenous peoples, and especially those residing in Vancouver's Downtown Eastside.

CONCLUSION

Study results emphasize the importance of increasing investments in culturally safe mental health and substance use programming, as well as outlining ways that essential health, social, and cultural services and supports can continue to be offered in the context of a pandemic.

139 - Transitions in Care for Persons with Limb Loss: A Qualitative Study of Health Care Provider Perspectives

Presenter: Crystal MacKay

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Sub-optimal transitions in care may result in hospital readmissions, emergency department visits, and increased health care costs. Health care providers (HCPs) can have a large impact on transitions in care. The objective of this research was to explore transitions in care from inpatient rehabilitation to the community for patients with limb loss, and to explore factors that impact transitions from inpatient rehabilitation to the community from the perspectives of HCPs.

APPROACH

A qualitative study was conducted using semi-structured interviews. Participants were eligible if they were HCPs currently working in amputation rehabilitation at a rehabilitation hospital in Ontario, Canada, with at least 1-year experience in this setting, and could speak and understand English. Interviews explored HCPs' perspectives on patients' transitions back to the community from an inpatient rehabilitation stay following amputation. Interviews were recorded, transcribed verbatim, and thematically analyzed using the six-step process of the DEPICT model (Dynamic reading, Engaged codebook development, Participatory coding, Inclusive reviewing and summarizing of categories, Collaborative analyzing, Translating).

RESULTS

Fourteen HCPs in Ontario from a variety of health care professions participated in this study. Five key themes were identified to describe the HCPs' perspectives on the factors impacting patients' transition in care following limb loss: (a) HCP Follow-up: "Keeping an Eye on the Patients"; (b) Preparedness: Strategies Used by HCPs for Preparing Patients for Discharge; (c) Finances and Funding: Insufficient to Meet Needs; (d) Psychosocial Support: "Easing the Burden of Their Transition"; (e) Self-Management: "The Reasons Behind the Amputation".

CONCLUSION

Findings suggest that improvements can be made to optimize transitions in care including: consideration of how resources are allocated throughout the continuum of care, improvements in communication between HCPs, active patient involvement, and creating amputee-specific support groups. Further research is warranted to develop/evaluate interventions to improve transitions in care.

140 - Treatment differences associated with six-month and one-year survival following stereotactic surgery for brain metastases

Presenter: Samantha Fowler

THEME: Cancer

BACKGROUND AND OBJECTIVES

Brain metastases develop in 25-45% of cancer patients and pose a significant risk for mortality. For patients whom surgical resection is not possible, whole-brain radiation therapy (WBRT) and stereotactic radiosurgery (single dose; SRS) or radiotherapy (fractioned dose; SRT) are the leading treatment options. Survival following these treatments varies by demographic and clinical characteristics. The objective of the present study was to examine the relations between these characteristics and survival following SRS/SRT for brain metastases.

APPROACH

We used a clinical database of patients who underwent SRS/SRT at the Saint John Regional Hospital from July 2012 to July 2020. We selected patients who had this treatment for brain metastases ($n = 163$) and included the following variables: age (≥ 65/< 65), sex (male/female), primary cancer diagnosis, number of brain lesions (1/≥ 2), treatment type (single/fractioned), WBRT (Y/N), six months (Y/N) and one-year survival (Y/N). We used chi-square tests to determine whether the proportion of patients who survived six months and one year following surgery differed across demographic and treatment groups.

RESULTS

Analyses revealed the proportion of patients surviving at six months and one year did not differ among demographic (age, sex) or clinical (number of lesions) groups ($p > 0.05$) but treatment factors were related to shorter and longer-term survival. Patients who underwent SRS were more likely to survive at six-months (63.2%) than those who had SRT (40.3%; $\chi = 7.36$, $p = 0.007$, $\Phi = 0.23$). WBRT was also related to six-month survival; more patients who had WBRT (70.8%) survived than those who did not (45.5%; $\chi = 7.65$, $p = 0.006$, $\Phi = 0.23$). The SRS/SRT effect was sustained at one-year ($\chi = 4.99$, $p = 0.025$, $\Phi = 0.19$), whereas the association with WBRT was non-significant at this time ($p > 0.05$).

CONCLUSION

Results suggest patients who received a single treatment are more likely to survive short- and longer-term than those who received fractioned treatment, whereas WBRT conferred only a short-term survival advantage. These results may be due to the clinical differences (e.g., performance status, disease burden) at presentation that informs treatment decisions.

141 - Trends in hyperpolypharmacy and use of major drug classes in the 10 years prior to nursing home admission in Ontario, Canada

Presenter: Laura C. Maclagan

THEME: Home Care, Long Term Care and Aging

BACKGROUND AND OBJECTIVES

Polypharmacy is common among residents of long-term care (LTC) homes and is associated with poor health outcomes including falls, fractures, and mortality. Although the high prevalence of polypharmacy in LTC is well-documented, little work has explored trends in the community prior to admission. We examined trends in the prevalence of hyperpolypharmacy and use of major drug subclasses prior to, on, and after the date of LTC admission among older adults in Ontario, Canada.

APPROACH

This retrospective cohort study identified persons aged 75+ years who were newly admitted to long-term care between April 1st 2017 and February 28th 2020 using health administrative data. We assessed the prevalence of hyperpolypharmacy (≥10 medications) and use of major drug subclasses from ten years prior to LTC admission through to one and a half years after admission, by quarter. Medications with a dispensing date plus days supplied overlapping the start of each quarter were defined as prevalent. Residents who died following admission were censored. Linear regression models were used to describe trends in the prevalence of hyperpolypharmacy over time.

RESULTS

We identified 61,470 residents newly admitted to LTC during the study period (mean age 86.6 [SD: 6.0], 65.9% female, 77.9% with dementia). The prevalence of hyperpolypharmacy increased over time from 3.6% ten years prior to admission to 11.3% at the quarter prior to admission—0.21% per quarter ($p<0.001$). On the date of admission, antidepressants (46.9%), statins (41.3%), ACE-inhibitors/ARBs (39.3%), proton pump inhibitors (37.4%), and antipsychotics (23.3%) were the most dispensed medication subclasses. Following LTC admission, the trend in hyperpolypharmacy stabilized (-0.02% per quarter, $p=0.70$). By one and a half years following admission, the prevalence of hyperpolypharmacy was 11.2%.

CONCLUSION

We observed steady increases in the prevalence of hyperpolypharmacy over the 10 years preceding LTC admission and a stabilization in the one and a half years after admission. Future work should examine medication reconciliation and deprescribing initiatives to mitigate these increases in hyperpolypharmacy.

142 - Trends in Inuit health services utilization in Manitoba: findings from the Qanuinngitsiarutiksait study

Presenter: Josée Lavoie

THEME: Indigenous Health

BACKGROUND AND OBJECTIVES

This study aimed to develop detailed profiles of Inuit accessing health services in Manitoba using administrative data routinely collected by Manitoban agencies, to support the development of Inuit-centric services. It was conducted in partnership with the Manitoba Inuit Association and Inuit Elders from Nunavut and Manitoba.

APPROACH

In this study, we documented the patterns of service utilization for all Inuit accessing services in Manitoba, whether residents of Manitoba or residents of the Kivalliq region. This choice was informed by priorities set by the Manitoba Inuit Association. We focused on two interrelated cohorts: Inuit from the Kivalliq region who come to Winnipeg to access specialized services and Inuit living in Manitoba.

RESULTS

Findings revealed that health services are primarily accessed in Winnipeg. Half of all health services accessed by Inuit from the Kivalliq region are for in-patient care. The other half is for advanced out-patient care including specialist consults. For Kivalliq Inuit, birthing is the most prevalent reason why hospitalization occurs, followed by diseases of the respiratory system. Noteworthy, rates of hospitalization for conditions treatable in primary healthcare for Kivalliq Inuit are considerably lower than those for Manitobans living in the northern part of the province (where comparable constraints exist).

CONCLUSION

For Inuit adults, rates of hospitalization for these conditions are comparable to those of Manitobans living in small communities. Inuit living in Manitoba are most often hospitalized for mental health reasons, although other reasons are nearly as prevalent. Our results support the need for more Inuit-centric health programming in Winnipeg.

144 - Understanding the experiences of persons with age-related vision loss (ARVL) in accessing and using community resources and services

Presenter: Ishita Aggarwal

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Age-related vision loss (ARVL) is the third leading chronic condition among adults. Vision loss impacts many aspects of daily life, including independence, mobility, social interactions, and health management, resulting in significant personal and societal burden. Navigating and accessing vision and community support services can be especially challenging. This study aimed to understand patient perspectives regarding the accessibility, effectiveness, and efficiency of these services at various points in the vision loss journey, enabling recommendations for improvement.

APPROACH

Semi-structured interviews with adults with ARVL were used to map patients' journeys through the healthcare system and explore their perspectives on accessing vision care services and related supports. Interviews were 45–90 minutes, were audio-recorded and transcribed verbatim. Two raters used content analysis to assign codes and identify key themes. Saturation was reached when new data did not further challenge the themes. Patient journeys were also mapped into tables that listed each support/service accessed chronologically, with positive and negative experiences associated with each one. Journey data was then integrated with identified themes, providing a deeper understanding of the patient perspective.

RESULTS

Fifteen participants with ARVL (14 female; ages 60-97 years) were interviewed. Causes of ARVL included dry/wet macular degeneration (N=9), other retinopathy (N=2), ocular dystrophy (N=2), glaucoma (N=2), and hemianopia (N=1). Analysis revealed several patient-, provider-, health system-, and environment-focused factors impacting patient experiences of access to vision loss resources/services. Patient-focused factors include individuals' ability to self-advocate and availability of familial and other social support. Provider-focused factors include professionals' attitudes and communication quality during clinic visits and ease of scheduling follow-up appointments. Health system-focused factors include referral processes, wait times, and awareness and availability of complementary health programming, such as occupational therapy and mental health support. Finally, environment-focused factors include the readability of signage in public spaces and on roads, and advances in technology.

CONCLUSION

This study revealed a number of individual, provider, health system, and broader environmental factors influencing access to services for patients with ARVL. Designing and implementing interventions to address these factors will likely improve delivery of care, increase patient satisfaction and quality of life, and save costs.

145 - Understanding the Social Interactions and Relationships Involved in Medication Dispensing and Administration Processes: A Social Network Analysis

Presenter: Troy Francis

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Past research has shown that controlled substances have been 'diverted' (stolen) from healthcare facilities. There remains a gap in understanding which social factors are the main contributors to drug diversion and how healthcare workers (HCWs) interact within the medication use process (MUP). The proposed project aims to reveal the types of social interactions, relationships, and tasks between HCWs that contribute to drug diversion within the MUP of healthcare facilities, using Social Network Analysis.

APPROACH

This study will employ exploratory sequential mixed methods using previously collected clinical observations data and cross-sectional network surveys in two units of a large academic community hospital in Toronto, Canada. Consenting HCWs involved in the MUP of each unit will be purposively recruited for cross-sectional surveys. The survey will collect data on demographics, social relations, and attitudes on drug diversion. The use of Bayesian network descriptive statistics and sociograms will provide a visual and empirical basis for comparisons across clinical units. Key outcome measures to determine influence, brokerage, and communication flow will be centrality and cohesion.

RESULTS

This study will allow for the understanding of how communication and social relationships may contribute to drug diversion risk in the MUP, which has a direct impact on patient and HCW safety due to opioid abuse. Applying a social network paradigm to diversion can broaden the understanding of the mechanisms by which knowledge translation is effective in the medication use process by examining the social structures that facilitate or impede evidence-informed practice. This will help hospitals summarize the current state of implemented safeguards for the management of controlled substances within their organization and will inform appropriate changes to workflow processes. Hospitals will be able to use this knowledge to identify opportunities for future interventions and to inform ongoing efforts to prevent diversion through guideline development.

CONCLUSION

This study will provide valuable insight into the social relations and tasks involved in securing the MUP in healthcare facilities from diversion. By considering the social structures of each unit we hope to provide awareness to the HCW workflow processes which may contribute to diversion risk within the MUP.

146 - Unforeseen Benefits: Outcomes of the Qanuinngitsiarutiksait study

Presenter: Leah McDonnell

THEME: Indigenous Health

BACKGROUND AND OBJECTIVES

This presentation reports on a series of unforeseen, yet positive contributions realized in the Qanuinngitsiarutiksait study, undertaken between 2015 and 2021. The contributions we report on are in addition to the main outcomes of the study, as here we focus on positive impacts the study has had directly on and for the Inuit community in Manitoba.

APPROACH

Scientific publications predominantly focus on research outcomes. Increasingly, community partnerships and relationships are mentioned, especially in research conducted with Indigenous communities. In partnership-based research, Indigenous communities expect researchers to contribute in a multitude of ways that go beyond doing research, to support community priority setting and action. In this paper we document the many positive unforeseen benefits the research project Qanuinngitsiarutiksait has had on the Inuit community in Manitoba.

RESULTS

Benefits include strengthening of the Manitoba Inuit community through hosting community feasts, games, and virtual events; creating opportunities to increase the visibility of Inuit and Inuit Elders public events, such as inclusion of Inuit recognition in as provincial and territorial land acknowledgements; supporting the growth of the Manitoba Inuit Association (MIA) in terms of staffing/programming, and presence at provincial policy tables; leveraging relationships towards the development of Inuit-centric primary healthcare services in Winnipeg; creating a method to identify Inuit in provincial administrative datasets which were used to track COVID-19 infection rates in the Inuit community. As a result, MIA’s visibility increased, and Inuit Elders have become essential contributors of Indigenous knowledge at Manitoba-based events. This transformation appears to be sustainable.

CONCLUSION

Efforts resulted in more programming opportunities, increased visibility and greater integration of MIA at policy tables. Qanuinngitsiarutiksait’s partnership-based approach multiplied immediate benefits to the Inuit community and created a research environment more likely to produce valid and relevant results and strengthened MIA’s ability to engage in research as a partner.

147 - Uptake and Challenges of Using Patient-reported Outcomes in Alberta's Pediatric Health Systems: A Multi-methods Study

Presenter: Sumedh Bele

THEME: Maternal and Child Health

BACKGROUND AND OBJECTIVES

Delivering Patient and Family-centered Care (PFCC) includes capturing outcomes directly reported by patients and families and understanding their experience with the care. One of the ways to facilitate the delivery of PFCC is through the use of Patient-reported Outcomes (PROs). However, there is a lack of understanding of the current uptake and challenges of using pediatric PROs in Alberta. Our study addresses this research gap.

APPROACH

A multi-methods study design was deployed, including qualitative and quantitative methods. Pediatric clinicians and academic research with the experience and interest in using PROs were invited to complete a quantitative survey to understand current uptake and knowledge of using pediatric PROs in Alberta. This survey included questions such as the name of PROs currently being used, types of PROs, mode of administration, type of health setting. Additionally, key stakeholders were purposively sampled for qualitative interviews to understand their perspectives on the current challenges in implementing pediatric PROs and support required to implement them within Alberta Health Services.

RESULTS

Data collection and analysis are currently underway, and the final results will be available at the conference. So far, 24 participants have completed the quantitative survey. Participants work as clinicians or as researchers in academic institutions. There is much diversity in the mode of administration and types of pediatric PROs currently being used in Alberta. We have already reached thematic saturation after 14 qualitative interviews. Primary data analysis shows that most participants acknowledge the importance of using PROs to provide PFCC, but some of them raised the issue of lack of clear guidelines on using PROs data in clinical care to improve healthcare delivery. The absence of system-level support, such as integration within electronic medical records systems, is considered a significant system-level challenge.

CONCLUSION

The routine use of PROs in pediatrics care relies on comprehensively understanding uptake, knowledge, and challenges in implementing PROs in pediatric health systems. Therefore, the findings of this multi-methods study from the largest integrated health system in Canada could be directly applicable to other pediatric healthcare settings in Canada.

148 - Using Facebook to promote the uptake of colorectal cancer screening

Presenter: Arlinda Ruco

THEME: Cancer

BACKGROUND AND OBJECTIVES

The use of social media presents a unique opportunity for cancer screening programs to motivate individuals to get screened. However, we need a better understanding of what types of social media messages for colorectal cancer (CRC) screening are preferred. The objective of this study was to develop social media messages promoting CRC screening uptake to identify messages preferred by the target audience.

APPROACH

We conducted a qualitative descriptive study and collected data through focus groups with Facebook users of screen-eligible age. Participants were presented with social media messages and asked to provide feedback. Messages were informed by the Health Belief Model, current evidence regarding screening communication and health communication and social media best practices. Focus groups were audio-recorded and transcribed and analysis was completed by two independent coders. If messages generated sufficient discussion, we developed a recommendation regarding the use of the message in a future social media campaign. General considerations about social media campaigns were also noted.

RESULTS

A total of 45 individuals participated in six focus groups. We developed recommendations for 7 out of the 18 messages tested; 1 was classified as strongly consider using this message, 4 as consider using this message and 2 as proceed with caution. The data suggest that participants preferred social media messages that were believed to be credible, educational, and with a positive or reassuring tone. Preferred messages tended to increase awareness about CRC risk and screening and prompted participants to ask questions, and to want to learn more about what they could do to lower their risk. Messages that were viewed as humorous, strange or offensive or that had a negative or excessively fearful tone were less well received by study participants.

CONCLUSION

Facebook users prefer social media messages for CRC that have a positive or reassuring tone, are educational, and that have a credible ad sponsor. Campaign planners should proceed with caution when considering messages that use humor or a fearful tone to avoid undermining their campaign objectives.

149 - Using routine fidelity assessments to identify quality gaps and inform system improvements: findings from the Early Psychosis Intervention Ontario Network

Presenter: Avra Selick

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Early Psychosis Intervention (EPI) is an evidence-based treatment model for youth experiencing their first episode of psychosis. EPI programs have been implemented across Canada, with 45 programs operating in Ontario. Like other evidence-based practices, EPI programs may not be implemented as intended, potentially negatively impacting client outcomes. The aim of this study was to review four years of fidelity data to understand service quality in Ontario EPI programs.

APPROACH

Almost half of Ontario EPI programs (n=21) received fidelity assessments between 2017- 2021. Participation was voluntary and each year programs were included based on a first come, first served basis until capacity was met. Fidelity assessments were conducted by two trained assessors using the 33 item First Episode Psychosis Services Fidelity Scale. Items were rated on a five point scale based on interviews with staff, clients and families, a chart review and administrative data. A rating of 4 indicated satisfactory performance. Mean program scores and item scores were calculated for the total sample, by assessment year and by program size.

RESULTS

Overall, most Ontario EPI programs were performing with satisfactory or near satisfactory levels of adherence to the model. Mean fidelity scores per program ranged from 3.1 to 4.4, with an overall average of 3.9. At the individual item level, however, results varied and there was a subset of items that programs were consistently challenged to deliver. This pattern held true across time and program size. Low scoring items included psychiatrist caseload, delivery of specialized psychosocial treatments (e.g., supported employment, cognitive behavioural therapy), and hospitalization prior to referral to treatment. Most of these items can only be addressed in a limited way at the program level and require system level intervention.

CONCLUSION

Routine fidelity assessments are an important strategy to identify service gaps and to inform efforts to improve quality of care. Effective, high quality EPI service delivery cannot be achieved by individual program level efforts alone; coordinated system level intervention is required.

150 - Using segmentation and population indicators to support integrated care.

Presenter: Walter Wodchis

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

The Ontario Ministry of Health introduced Ontario Health Teams (OHTs) to advance population health and integrated care for attributed populations ranging from 35,000 to nearly 1 Million inhabitants each. This presentation describes the data and approaches being used to support the development of OHTs.

APPROACH

Extensive health administrative data that are available for all Ontario residents are used to segment OHT attributed populations and to provide improvement indicators related to health services in acute, primary care and community sectors. Indicators include potentially preventable emergency department and hospital visits, continuity of primary care, health services and home care use at the end of life and for frail older adults. Data are shared provincially through reports and monthly webinars with 300+ attendees. Individual OHTs receive data and interpretive guidance to direct their efforts.

RESULTS

From the health administration data we found the greatest variation in indicators for potentially avoidable emergency department visits, unnecessary acute care hospital days, continuity of primary care and premature mortality. Segmenting the population according to different health care needs ranging from non-users to high users and end-of-life populations provide additional insights to target improvements including for example particular gaps in screening amongst relatively low users of healthcare.

CONCLUSION

The data being provided by our research team help each OHT focus on areas where they have the greatest opportunities for improvement. Using population segmentation is providing improved information to target specific populations for improvement ranging from individuals with relatively low healthcare utilization to those with high needs and costs.

151 - Validating the content and estimating the feasibility of the Child Community Health Inclusion Index: An evaluation tool for measuring health inclusion of children with disabilities in the community.

Presenter: Paul Yoo

THEME: Equity and Vulnerable Populations

BACKGROUND AND OBJECTIVES

Participation is a human right and a key component of health and development in children with disabilities. Inclusive communities and environments can facilitate the community participation of children of disabilities. No measures comprehensively assess the inclusion of children with disabilities in Canadian communities. This study aims to establish the content validity, improve the clarity, and estimate the feasibility of the Child Community Health Inclusion Index (CHILD-CHII).

APPROACH

A purposeful convenience sample of stakeholders including health care professionals, teachers, special educators, researchers, counselors, and policymakers participated in the validation process and were recruited to apply the tool on facilities in different community sectors (Health, Education, Public Spaces, Community Organizations). A modified e-Delphi technique was conducted. The importance and clarity of each item were rated on a Likert scale in two separate rounds. Depending on consensus, items were retained, modified, or omitted. Following the Delphi technique, the tool was then tested for feasibility measured as four indicators addressing the length of the tool, difficulty obtaining the information in order to respond to the items, clarity of the items in live settings, and value of the tool and the generated information, all rated on a Likert scale.

RESULTS

48 participants completed the first round of the Delphi technique and 38 completed the second. 106 items were presented of which 101 items were rated important with high consensus and were retained. 17 items were modified for clarity and presented in the second round. In the second round, all 17 modified items were deemed clearer. 12 separate participants applied the CHILD-CHII on community facilities. 92% of participants indicated the tool was long or much too long; 66% reported the tool was clear or very clear; 58% rated the tool to be valuable or very valuable; ratings for difficulty differed without a clear consensus.

CONCLUSION

The CHILD-CHII and its validated content assess aspects of the community that align with social determinants of health, the community well-being framework and the WHO ICF. Although comprehensiveness and content validity were ascertained, pragmatic aspects of feasibility such as length may be a barrier to the application of such measures and will need to be considered in the final version. Measuring these aspects is fundamental to inform the development of health promotion interventions and policies to improve inclusion, participation and health of children with disabilities in the community.

152 - Virtual care use during the COVID-19 pandemic and its impact on healthcare utilization in patients with chronic disease: a population-based repeated cross-sectional study

Presenter: Vess Stamenova

THEME: COVID-19

BACKGROUND AND OBJECTIVES

It is currently unclear how the shift towards virtual care during the 2019 novel coronavirus (COVID-19) pandemic may have impacted chronic disease management. The goals of our study were to provide a description of the levels of use of virtual care services relative to in-person care in patients with chronic disease across Ontario, Canada and to describe levels of healthcare utilization in low versus high ¬virtual care users.

APPROACH

We used linked health administrative data to conduct a population-based, repeated cross-sectional study of all ambulatory patient visits in Ontario, Canada (January 1, 2018 to January 16, 2021). Further stratifications were also completed to examine patients with COPD, heart failure, asthma, hypertension, diabetes, mental illness, and angina. Patients were classified as low (max 1 virtual care visit) vs. high virtual care users. A time-series analysis was done using interventional autoregressive integrated moving average (ARIMA) modelling on weekly hospitalizations, outpatient visits, and diagnostic tests.

RESULTS

The use of virtual care increased across all chronic disease patient populations. Virtual care constituted at least half of the total care in all conditions. Both low and high virtual care user groups experienced a statistically significant reduction in hospitalizations and laboratory testing at the start of the pandemic. Hospitalization volumes increased again only among the high users, while testing increased in both groups. Outpatient visits among high users remained unaffected by the pandemic but dropped in low users.

CONCLUSION

The decrease of in-person care during the pandemic was accompanied by an increase in virtual care, which ultimately allowed patients with chronic disease to return to the same visit rate as they had before the onset of the pandemic. Virtual care was adopted across various chronic conditions, but the relative adoption of virtual care varied by condition with highest rates seen in mental health.

153 - What is known about the current state of contact tracing for COVID-19 in hospitals? A scoping review

Presenter: Brynn O'Dwyer

THEME: COVID-19

BACKGROUND AND OBJECTIVES

Contact tracing (CT) has been a key strategy that aims to control the COVID-19 pandemic. A successful and effective contact tracing strategy may not only help to alleviate COVID-19 related capacity concerns within health systems, but also ensure the health and safety of patients and employees. This project aims to present an overview of existing literature on different COVID-19 contact tracing strategies that have been used in hospitals, the strengths, and weaknesses.

APPROACH

Following the JBI Scoping Review guidelines, we conducted a scoping review of the literature to identify the breadth and depth of articles published on CT strategies used in hospitals during the COVID-19 pandemic. A search strategy (2019-2021) was used across three electronic databases (Medline, PUBMED, CINAHL). Search terms covered three domains including 1) COVID-19 related terms 2) CT-related terms 3) hospital-related terms. Only studies describing the use of CT strategies used in hospitals, and presenting details about, were included in this literature overview.

RESULTS

26 published articles were extracted that referred to the use of CT in diverse hospital settings (academic, tertiary, acute and quaternary). The studies were conducted across 11 different countries. The main strategies identified for CT were interview-based, technology-based or a combination of both. Interview-based strategies used telephone interviews for information retrieval, while technology-based strategies included various applications of information technology. Evidence demonstrated that interview-based strategies support a comprehensive understanding of epidemiological linkages; however, they are often labour exhaustive. Technology-based strategies increased the timeliness of CT in complex workflows but often depend on user acceptance and compliance. Combined strategies provided thorough information while increasing efficiency in resources, however, these strategies often necessitated the collection of large amounts of data.

CONCLUSION

Interview-based strategies for CT were reported most frequently. Although they provide a detailed information, the timeliness and efficiency of CT using these strategies is limited. Technology-based CT strategies may address these limitations by providing rapid response. More research is required to further understand their success in hospitals.

154 - Who holds the power? A qualitative study exploring team-based care for patients experiencing delayed care transitions

Presenter: Lauren Cadel

THEME: Health System Performance (including access to care, quality, safety, efficiency, leadership)

BACKGROUND AND OBJECTIVES

Team-based approaches for discharge planning are common, with several benefits and challenges. However, little is known about how healthcare providers function as a team when dealing with patients experiencing a delayed discharge. Delayed discharges are complex, often affecting patient safety and outcomes. We explored what was working well with team-based discharge processes, as well as challenges experienced, in order to understand how teams can function to better support transitions for patients experiencing a delayed discharge.

APPROACH

This descriptive qualitative study included key stakeholders from two diverse health regions in Ontario. Participants included healthcare providers, managers, and organizational leaders, who had experience with delayed discharges. All participants took part in in-depth interviews conducted in-person, by telephone, or teleconference between December 2019 and October 2020. The interviews were recorded and transcribed for analysis. The transcripts were coded and analyzed inductively and deductively using a directed content analysis approach. Relevant codes were exported and reviewed in-depth in team meetings. The study team discussed overarching concepts and key ideas, which were merged and developed into categories.

RESULTS

We organized our findings into three main categories based on how teams can better function to support delayed discharges: (1) collaboration with physicians makes a difference, (2) leadership should support frontline healthcare providers, and (3) partnerships across sectors. Regular engagement between physicians and other healthcare providers facilitated better collaboration and overall working relationships. This led to improved consistency of information provided to patients and caregivers. Authentic engagement between senior leadership and frontline healthcare providers was also critical for improving team functioning. Providers valued having their feedback sought and integrated into initiatives targeting the problem. Improved partnerships across sectors included the better integration of the community sector into the discharge planning process (e.g. standardized integrated care, embedded care coordinators).

CONCLUSION

Discharge delays are a complex and confusing time for patients and families. Given the emphasis on team-based care, understanding the challenges and opportunities with team functioning is critical. Acting on the recommendations outlined has the potential to improve how teams function in supporting patients experiencing a delayed discharge.

155 - Youth and family engagement in a pediatric rare disease research network

Presenter: Maureen Smith

THEME: Patient and Public Engagement

BACKGROUND AND OBJECTIVES

INFORM RARE is a patient-oriented multi-stakeholder research network established to generate evidence to improve care and outcomes for children with rare diseases. Our initial focus is on the design and conduct of registry-based clinical trials for three conditions: phenylketonuria (PKU), spinal muscular atrophy (SMA), and mucopolysaccharidoses (MPS). To ensure that our research focuses on questions prioritized by patients and their families and on meaningful outcomes, patient engagement is woven into every aspect of our work.

APPROACH

We have co-developed a multi-layered patient engagement strategy. A patient partner co-principal investigator (MS) has led our patient engagement approach from the beginning. Six patient partner co-investigators have the opportunity to contribute to the network's working groups according to their preferences. Two separate advisory committees of 11 youth (aged 12-18 years) and 9 parents with lived experience of PKU, SMA or MPS contribute to the research at key points. Advisors were selected through an application process to achieve a breadth of perspectives based on age, clinical condition, and geography. We compensate patient partners and advisors in recognition of their contributions.

RESULTS

The patient partners (principal and co-investigators) contributed to the development of a successful funding application that established INFORM RARE and have co-developed a statement of patient engagement principles for the network. They have also joined working groups to co-design projects related to developing patient registries, selecting clinical trial questions, and developing interventions. Advisory group members have provided valuable feedback, including suggestions about the content and layout of an online survey, meaningful trial outcomes, and features of a video game intervention. We have provided regular updates to patient partners and advisors to communicate the impact of their contributions and co-designed a patient engagement tracking system that has informed the development of an evaluation plan to help us make ongoing improvements to our approach.

CONCLUSION

Our multi-layered approach to patient engagement results in three levels of engagement: involve, collaborate and lead/support. Affording opportunities for patient partners to be intensively involved in research co-design and for a larger group to play an advisory role has helped to ensure that our research is both feasible and meaningful.