Trillium
Primary Health Care Research Day

E-Posters

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Utilizing team-based care for lung cancer screening: Implementing a screening tool to assess eligibility for lung cancer screening at the Smoking Cessation Clinic at SMH-FHT

Keshini Abeyewardene, MD[1, 2] Alida Devine, NP[1]; Lisa Miller[1]; Dr. Caroline Ruderman, MD[1,2]
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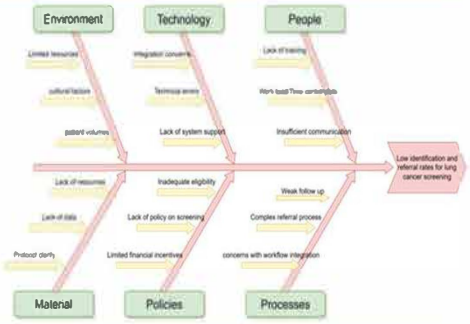
BACKGROUND

- Lung cancer (LC) remains the leading cause of global cancer incidence and mortality worldwide, with 2.1 million cases and 1.8 million deaths in 2018 [1].
- The Canadian Task Force on Preventive Health Care recommends annual low-dose CT (LDCT) screening for adults aged 55-74 with a 30 pack-year smoking history or quitting less than 15 years ago [2].
- The National Lung Screening Trial demonstrated a 20% relative reduction in lung cancer mortality with Low dose CT [3].
- EMR prompts and integrated shared decision making (SDM) tools show promise for enhancing lung cancer screening in primary care [4].

ROOT CAUSE ANALYSIS



AIM STATEMENT

By the end of Q2 2025, the Academic Family Health Team at SMH aimed to implement a screening tool accessible to the smoking cession clinic of the Family Health Team (FHT) at SMH to identify and flag all eligible patients for low-dose CT lung cancer screening, aiming to increase identification and referral rates by 25%.

METHODS

Setting:
Conducted at the Smoking cessation clinic at the SMH Family Health Team.

PDSA Cycle summary:

- In the first PDSA cycle, a lung cancer screening tool was embedded into the new patient consult form at the Smoking Cessation Clinic to enhance assessment of screening eligibility.
- When eligible patients were identified through the tool, an automatic message was sent to their Most Responsible Provider (MRP).
- After nine weeks, 11 out of 12 new patients were screened; five were eligible for low-dose CT, with one referred to their MRP and one referred directly for LDCT by the MRP.
- Based on these results, the next step was to increase the sample size to include all patients seen at the clinic and to raise staff awareness about the tool's availability in the EMR.

- In the second PDSA cycle, the screening tool was expanded to include all patients, including follow-ups, and staff were informed via email about the tool and the referral process.
- After7.5 weeks, out of 37 patients, seven were eligible (most follow-up patients had already been screened previously), three were newly eligible for referral, and one was referred to their MRP.

LIMITATIONS:

- PDSA2 was shortened due to reduced funding for the smoking cessation clinic and a temporary pause in clinic operations, cutting patient visits by one-third.
- High no-show rates—around 50%—hindered efforts to expand screening.

ADDITIONAL INFORMATION:

- Both PDSA cycles showed an increase in screening-eligible patients, especially after including follow-up visits
- Some eligible patients in PDSA1 declined low-dose CT, likely due to social barriers.

RESULTS

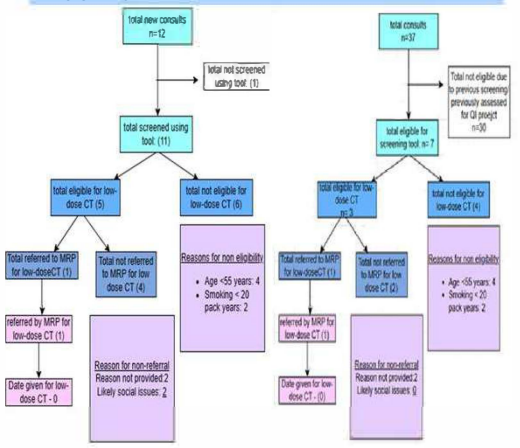
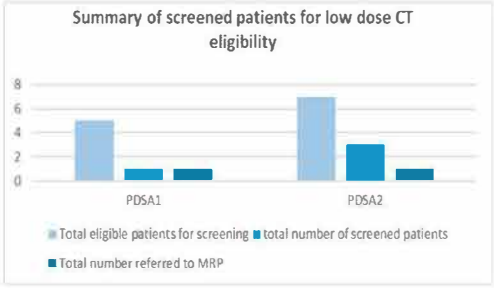


Figure 1. PDSA 1 Vs PDSA 2



DISCUSSION

- Utilizing team-based care and implementation of an EMR-embedded lung cancer screening tool in a smoking cessation clinic led to high rates of identifying eligible patients.
- Expansion of the tool to include all patients (new and follow-up), increased the number of eligible patients in PDSA2.
- Despite improved identification, referral rates remained low, indicating a gap between eligibility and action.
- Limitations such as reduced clinic activity, appointment cancellations, and patient hesitancy contributed to barriers in screening uptake.
- These findings show promise and value in utilizing team-based care and integrating EMR prompts and structured tools in routine care to identify eligible patients for lung cancer screening.
- However, addressing gaps in the referral process, ensuring staff clarity on next steps, and exploring patient-centered barriers (e.g., social concerns or reluctance toward imaging) are essential for increasing uptake in screening which could be potential next steps in enhancing lung cancer screening.

ACKNOWLEDGEMENTS

- Special thank you to the team at the Smoking cessation clinic.

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Participant satisfaction and perceived impacts of the EMBOLDEN program: A co-designed community-based intervention to promote mobility and social participation to support older adults experiencing health inequities

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Background

- EMBOLDEN is a community-based healthy lifestyles program promoting mobility and social participation in older adults facing health inequities
- The program and its implementation were co-designed with older adults and jointly delivered by providers from primary care, public health, and recreation partners
- **Aim:** To present older adults' satisfaction and perceived impacts of the program (part of an implementation-effectiveness trial in Hamilton and Toronto)

Approach

- Randomized control trail in 10 urban neighbourhoods with higher i) proportions of older adults and ii) levels of health inequity across in Hamilton (8) and Toronto (2)
- Surveys conducted at the midpoint and end of intervention to measure satisfaction
- Midpoint feedback received (via multiple mechanisms) incorporated into program
- Convergence of descriptive and thematic analysis of 5-point Likert scale and open-ended response questions, respectively

Results

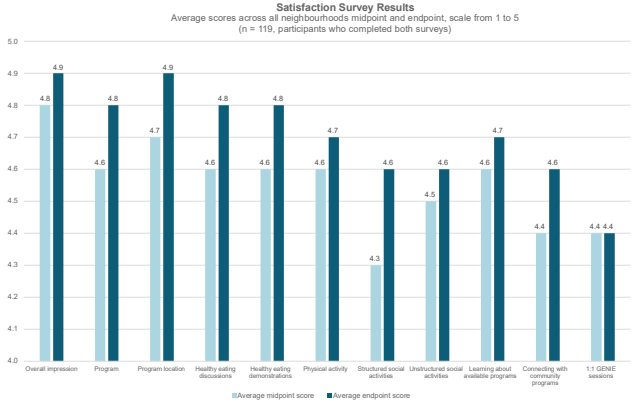
Participants (n=157) reported high satisfaction across all neighbourhoods (mean = 4.68/5 overall program; 4.33-4.68 across program components)

High satisfaction with healthy eating discussions (4.61) and demonstrations (4.59), and physical activities (4.59); highlighted educational and social benefits

Higher satisfaction with unstructured social activities than structured (4.61 vs. 4.33); emphasized forming ongoing connections and meeting socialization need

High satisfaction with system navigation (4.36-4.61), with benefits such as new knowledge about programs and services

Suggestions for improvement included more time for connecting socially, refinements to the system navigation approach, and accessibility considerations



"It has made a huge impression and difference for me and my family food-wise, fitness-wise and awareness[-wise]. [The] information has been (is) very useful."

"Loved the program. Didn't realize how active they could be in 25 minutes. Loved that it was nutrition, physical and other information; it was all-encompassing."

"It's a good way to learn healthy habits while socializing and learning about the community."

"This program has helped me in many aspects of my daily living and social interaction."

"It gave me the impetus to try things I wouldn't have tried by myself."

"I look forward to every Wednesday's EMBOLDEN class to see everyone."

"I wish everyone could take these classes!"

Conclusions

- High participant satisfaction across neighbourhoods infers that older adults experiencing health inequities valued program
- Increasing scores following midpoint improvements demonstrate the value of co-design and responsiveness to community feedback, aligning community priorities with EMBOLDEN's mission to promote improved mobility, nutrition, and social participation in older adults
- Continuing to evaluate EMBOLDEN's feasibility, acceptability, and effectiveness will inform its long-term implementation and sustainability strategy
- Further convergence with forthcoming trial findings will provide a rich understanding of EMBOLDEN's outcomes

Intervention Components

Physical activity

Healthy eating

Building social connections

System navigation

Format: Group sessions + ≤ 3 individual navigation sessions

Mode of delivery: In-person at a local community venue

Duration: 3 months

Frequency: Weekly (90-120 min)

Integrated health and social care

Participating Neighborhoods

Hamilton:

Toronto:

Primary Care Clinicians Sending Referrals, a Time-Based Comparison of Fax and Electronic Referral (eReferral) Workflows

Dr. Mohamed Alarakhia, Sarah Newman, & Kayla Wierts

amplify care

Background

Clinician burnout is a significant issue and can result in a number of negative consequences including suboptimal patient care delivery, adverse mental health outcomes, and an increased likelihood to leave the practice.[1] According to the 2024 National Survey of Canadian Physicians, 44% of respondents reported feeling burned out to some extent, with 5% feeling completely burned out.[2] One source of clinician burnout is increased time spent on clerical and administrative tasks within electronic medical records (EMR).[1] Ideally, clinicians would prefer to spend less of their time on administrative tasks so they can maintain a better work-life balance and increase capacity for clinical care.[1] As there is significant risk to primary care practices, solutions or interventions are needed to ensure primary care clinicians can continue to deliver critical care to their patient populations while minimizing the risk of burnout.

eReferral could provide a way to decrease administrative burden by reducing the manual documentation and tracking required to send referrals – supporting the goals of Ontario Health and Patients Before Paperwork (Pb4P).

The aim of this study is to assess the impact that eReferral can have on the time spent sending referrals.

Methods & Approach

For this study, four different test patient scenarios were developed, that indicated the need to send a referral to a specialist or health service with the main goal of mirroring real-world scenarios as much as possible.

The four health services included:

- CT
- MRI
- Orthopedics
- Cardiology

Three primary care clinicians participated and completed the study requirements. The clinicians were asked to send referrals as they would in normal practice using their fax workflow first and then send the referral through the eReferral network to create comparable pairs of referral scenarios.

The participating clinicians had been using eReferral for multiple years and are very comfortable with their workflows, all working within an integrated Telus PSS EMR.

In total, 11 paired referral scenarios, one fax referral and one eReferral, were created within the study and used for analysis.

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Key Findings

The findings in this case study, despite the limited sample size, highlight that utilizing the eReferral solution could reduce the number of minutes clinicians spend sending referrals on a daily basis. This creates the potential to increase efficiency in their administrative tasks, and when fully adopted and implemented across the province, the time-savings of eReferral become even more impactful.

Across the 11 paired referral scenarios, a total of 13 minutes and 29 seconds were saved when clinicians used eReferral to send referrals in comparison to using their fax-based workflows - an average of **1 minute and 13 seconds saved per case**. **In every case, the eReferral solution was quicker and saved the clinicians' time.**

The clinicians who participated in this case study estimated they send an average of 22 referrals per week. Utilizing this number as an average for clinicians more broadly, we could predict some possible time savings:

If clinicians were using fax to send, on average, 22 fax referrals per week and if all these referrals were all completed using eReferral – that would mean that clinicians could save upwards of **26 minutes per week** based on the findings from this study.

Participant Testimonials:

> I have been using [Amplify Care] digital health supports, like eReferral, for many years now. Every minute that can be saved on administrative tasks allows me to have extra time to spend with my patients, providing direct patient care. eReferral specifically, allows me to avoid doing long searches to find out where to refer my patient or spending time figuring out if a specific referral form is required and often allows me to see an approximate wait time for an appointment. Additionally, tracking messages are automatically sent to the reception team to ensure that the referral doesn't fall through the cracks and there are direct links in the chart for the team to check the referral status and add additional information as needed. eReferral is an invaluable tool in my practice.
>
> Nurse Practitioner

> eReferrals make communication between the referring clinician and the referral source much easier. They can add comments or requests which are easier to reply to, and we can add further requests (for example, to triage a diagnostic imaging request more urgently based on new clinical symptoms) or add documents requested by them, all directly through the eReferral tool in the chart. This is not only more useful but saves a considerable amount of time for both the clinician and the referral source by not having to spend time on the phone trying to reach each other.
>
> Family Physician

Limitations & Future Opportunities

This study was completed on a small scale and had a limited sample size and paired scenarios; this reduced the variety of workflows to assess. In addition, there was limited capacity, and the participating clinicians were only able to complete one comparison for each tested specialty. The participating clinicians were also experienced with eReferral, which will increase the speed at which they are able to use the eReferral solution. As well, each clinician had an integrated Telus PSS EMR, other EMRs may have a different workflow than the one tested. And finally, this study was completed in a test scenario, which is more controlled than a real-world practice scenario.

Future study opportunities may include testing the amount of time required to manage and track previously sent referrals, as participating clinicians noted the most significant time savings occurs after the referral has been sent. Additionally, testing the receiving process could provide further insights across the continuum of care. And finally, this study could be expanded in scope to include more clinicians, specialties, EMR systems and regions to make more wide-reaching claims.

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Co-Creating a Future for Primary Care Sustainability: A Relational Approach to Building a Saskatchewan Participatory Practice-Based Research and Learning Network (PBRLN)

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Department of Family Medicine, University of Saskatchewan

Background

- The complexity of patient care and the shift towards person-centered care demands transformation that fully integrates the patient/family preferences, needs, and values while at the same time recognizing each person not merely as a recipient of care but as an expert in their own lived experience.
- Saskatchewan has shown this strength in building relational equity-driven partnerships across primary care settings.
- Using enhanced participatory approaches, we continued to engaged clinics, providers, patients/people with lived experience (PWLE), and administrators in co-creating context specific processes for strengthening primary care in their clinics.
- This momentum has catalyzed interest in establishing a province-wide Practice-Based Research and Learning Network (PBRLN).

Approach

- We are using relationship-based, value-driven, context-specific strategies grounded in participatory research methodologies to co-design a PBRLN that reflects Saskatchewan's diverse primary care contexts.

- Within this approach, values such as respect, humility, relationships, responsibility, reciprocity are optimized within engagement capable environments.
- We are harmonizing (opposed to integrating) roles, voices, strengths and capacities to foster an environment where everyone belongs.

Findings (Short-term and Expected long-term

- This process of co-creation has been supported by facilitating engagement with physicians, nurse practitioners, administrators, Indigenous partners, PWLE, decision makers, Site Scholarship Leads (SSLs), and researchers from multiple practice settings.
- Our early engagement prioritized collaborative governance structures, shared infrastructure, and the co-development of tools for team-based care and learning.
- Site-specific needs, equity principles, and transformative learning environments (TLEs) are guiding our short/long-term co-designed outcomes.

Conclusion

- We envision this evolving PBRLN will reflect a shift from traditional, top-down research networks to one centered on relational equity, local responsiveness, and co-ownership.
- We believe this approach will foster a sense of belonging among stakeholders and enable sustainable, context-specific innovations in care delivery, cultural humility & safety, practice improvement including research, and education.

University of Saskatchewan | Department of Family Medicine

Differences in Mental Healthcare Utilization Among Children and Youth in Ontario: Interrupted Time-series Analysis of Population-based Data

Amanda Bakke[1,2] | Barbara Zelek[1,2] | Christa Wang[4] | Roya Daneshmand[5] | Brianne Wood[1,3]
NOSM University[1], The Dr. Gilles Arcand Centre for Health Equity[2], Thunder Bay Regional Health Research Institute[3], ICES[4], Kiiwetinoong Healing Waters Ontario Health Team

Introduction

The high prevalence of mental health difficulties in adolescents is seen as the single most critical issue facing young people today[1]. The largest cause of years lived with disability worldwide is mental illness, and 75% of mental disorders emerge in early adulthood[2,3]. In Canada, youth experience the highest rate of unmet mental health needs, with 75% who require mental health care not receiving specialized services[4]. Therefore, rates of youth mental disorders are increasing while effective access to mental health care is limited. Barriers to accessing mental health care are further complicated by several intersecting factors, including gender disparities[1], living in rural and remote communities[5], and possessing racialized identities[6].

Objectives

1. Analyze the prevalence of mental health system utilization in children, adolescents, and young adults aged 5 to 25 years in Ontario.
2. Examine the impact of sex, age, geography, and marginalization on service utilization.

Methods

- Repeated cross-sectional interrupted time-series study.
- Examined physician-based mental health service utilization among adolescents and young adults aged 5 to 25 years in Ontario, Canada from 2017-2023 using data from ICES.
- Descriptive statistics characterized mental health service use trends by age, sex, and year.
- Multivariable logistic regression models examined associations between mental health service use and covariates, including geography, and indices of marginalization.

Conclusions

Findings indicate that male youth and those living in rural and remote communities are less likely to access physician services for mental health presentation. Northern Ontario youth had different patterns of utilization compared to Southern Ontario youth. These results underscore the importance of examining region-specific barriers and highlight the need for population-specific access strategies. Such evidence should be considered when planning and implementing mental health services delivery in Ontario.

Results

Demographics

3,772,145 Ontario residents aged 5-25 were included in this study cohort between 2017-2023.

- **Northern Ontario:**
  - 5% study population
  - 70% 11-25 years
  - 37% live in rural areas
- **Southern Ontario:**
  - 95% study population
  - 70% 11-25 years
  - 6% live in rural areas

Sex Variations in Mental Health Service Utilization

Female participants consistently showed higher relative rates (RR) of mental health visits when compared to males during the study period.

- **Northern Ontario:**
  - Females aged 11-15 years had highest RR=1.17, 95% CI[1.11-1.23]
  - Males aged 11-15 years had highest RR=0.89, 95% CI[0.84-0.94]
  - When comparing female and male RR of visits for those aged 11-15 years, females RR was 28% higher than males
- **Southern Ontario:**
  - Females aged 11-15 years had highest RR=1.12, 95% CI[1.11-1.14]
  - Males aged 21-25 years had highest RR=0.97, 95% CI[0.96-0.98]
  - When comparing highest female and male RR of visits, females RR was 15% higher than males.

Regional Variations in Mental Health Service Utilization by Urban and Rural Setting

Regional disparities were observed in both urban and rural settings across Northern and Southern Ontario, with more pronounced differences in the north.

- **Northern Ontario:**
  - Rural females RR=0.90, 95% CI[0.79-1.02]
  - Rural males RR=0.77, 95% CI[0.68-0.86]
  - When comparing rural females and males, female RR was 13% higher than males
- **Southern Ontario:**
  - Rural females RR=0.99, 95% CI[0.94-1.04]
  - Rural males RR=0.94, 95% CI[0.82-1.07]
  - When comparing rural females and males, female RR was 5% higher than males
- **Northern vs Southern Ontario:**
  - Rural females in Southern Ontario RR 1% lower than expected, in Northern Ontario RR 10% lower than expected = 9% difference.
  - Rural males in Southern Ontario RR 6% lower than expected, in Northern Ontario RR 23% lower than expected = 17% difference.

Marginalization Index Variation in Mental Health Service Utilization

Associations between mental health service utilization and ON-Marg were largely non-significant in both regions. However, some trends were observed.

- **Material Resource Domain:**
  - Southern Ontario females in quantile 1 RR=1.05, 95% CI[1.01, 1.10]
  - Southern Ontario males quantile 1 RR=0.91, 95%CI[0.83, 0.99]
  - All other groupings were not statistically significant
- **Age-Labour Force Domain:**
  - Southern Ontario females in quantile 1 RR=1.05, 95% CI[1.02, 1.09]
  - Northern Ontario males quantile 1 RR=0.73, 95% CI[0.62, 0.86]
  - Northern Ontario males quantile 5 RR=0.75 95%CI[0.69, 0.81]
  - All other groupings were not statistically significant
- **Household and Dwellings Domain:**
  - Southern Ontario females in quantile 1 RR=1.11, 95% CI[1.07, 1.15]
  - All other groupings were not statistically significant
- **Racialized and Newcomer Population Domain:**
  - No statistically significant differences in the relative rates

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Challenges in Recruitment and Retention of Paramedics: Insights and Solutions in Northern Ontario

Amanda Bakke[1,2] | Meagan Slack[2,4] | Michael Longeway[4] | Brianne Wood[1,2,3]
NOSM University[1], The Dr. Gilles Arcand Centre for Health Equity (NOSM U) [2], Thunder Bay Regional Health Research Institute[3], Ornge[4]

Introduction

How, where, and when people access health care are key indicators on the equity and effectiveness of health systems in Canada. Disparities in access to healthcare are more prevalent in rural communities compared to urban counterparts[1]. Paramedicine is an essential aspect of the healthcare system, with paramedics often exposed first-hand to the social determinants which influence a patient's state[2]. In Ontario, Ornge is the provincial air ambulance service provider and the primary employer of flight paramedics. Patients living in Northern, rural and isolated regions, including many First Nations communities, whose local health care services range from nursing stations to small clinics to a community hospital, must fly to access emergency or specialized services[3,4].

Like other workforce sectors who are in "crisis mode" following pandemic conditions[5], flight paramedicine, and paramedicine more generally, is plagued by workforce shortages, in Ontario and Canada. For the paramedic workforce, particularly those working in these high need and under-resourced areas, understanding how to optimize the paramedic workforce could give insight into immediate ways to improve staffing in Northern and rural settings, and increase the desirability to work and stay in these areas.

Objectives

1. Examine the facilitators and barriers to recruitment and retention of flight paramedics, specifically in Northern and rural Ontario settings.
2. Identify recommendations for Ornge to strengthen the flight paramedic workforce in these settings.

Methods

- Mixed-Methods: Online survey & interview discussions (Romeo File No: 31571).
- Quantitative Analysis for survey response data.
- Qualitative Thematic Analysis for survey open-ended response and interview discussion data.
- Results mapped to Whole-of-Person Retention Improvement Framework encompassing Workplace/Organizational, Role/Career, Community/Place[6] and the Plan, Recruit, Retain framework encompassing necessary elements incorporated into strategic planning to ensure recruitment and retention of the right professionals in rural and remote communities[7].

Results

Facilitators and Barriers for Recruitment and Retention

Facilitators

Community / Place
Established community roots = ↑ quality of life, connections and support

"I am able to live in a northern city where I can enjoy northern outdoor activities (downhill skiing in winter, sailing on Lake Superior, camping, fishing in summer) and also enjoy aspects of city life, my wife grew up here, her parents live hereand have helped with child care over the years..."

Role / Career
Professional development, expanded medical scope, career growth = Retention at Ornge

"It's a lot more diversity, which I think is a big reason paramedics in general like their jobs. And probably something that medics coming to Ornge would look for is that ability to not be doing the same thing day in and day out."

Workplace / Organizational
ACP/CCP certification and training for a higher scope of practice = Recruitment to Ornge

"I reallyenjoyed land ambulance but I saw that pretty much immediately that I wouldwant to progressfurther at some point in my career. And given that Ornge provided education for us, that was a big draw."

Barriers

Community / Place
Relocation to North impacts quality of life, cost of living, family relationships + "Rotating door" of Southern staff impacts work culture and morale

"You have to be a minimum advanced care land paramedic to be able to do it, which means we're, again, recruitingfrom the South and bringingthese people upwhowantto work for Ornge, which is so cool. They'll comedo their timein northern Ontario and we become this factory oftraining new medics andhavingthemleaveand training new medics and having them leave."

Role / Career
Career inequities of Northern paramedics + lack of access to professional development. Low-acuity calls = Loss of confidence for certain procedures

"So it's burnout from doing lower acuity issues, especially when you come from southern Ontario and that's what all you did for 60% or 70% ofy ourcalls...That's its own burnout. Its own mental fatigue..."

Workplace / Organizational
No training pipelines in North = ↓ recruitment to Northern Ornge bases. Different roles of Northern vs Southern paramedics = unique challenges (fixed wing work)

"There have been a few who have stayed and had family here andeverything but ultimately felt thatthey had tomove because they were burning outwiththe type ofwork that we do. So that's another touchstone. I don'tfeel that the draw ofthe job is strong enough toholdpeople in the north compared tothe draw offamily."

Recommendations for Recruitment and Retention

Plan

Community / Place
Invest in long-term solutions to promote a positive work culture at Northern bases for those committed to these areas.

"It's been six years and nothing's been done... So it's like, they say, "We want to make this better. We want to make this work." And all I can see is it's all going to be fly in, fly out...And slowly as bases keep falling or cracking or falling apart, it's going to go to fly in, fly out. Instead of the other option, which would be to train from base to op..."

Role / Career
Recognize the unique roles of Northern Ornge paramedics, including workload, service population and involvement in education, in organizational policies, decision-making, and respective incentives.

"Let's try to throw some extra money to the north here. Let's give another week of vacation for the first five years to people that come up here from southern Ontario so that they can go down to southern Ontario. Let's try to, if you stay in the north, you get your vacation equivalent of like...you would fall into Ornge's vacation of 10-year land..."

Workplace / Organizational
Build training pipelines for paramedics in Northern Ontario(PCP -> CCP)
Increase funding options for trainees relocating to acquire advanced certifications.

"Training somebody from here. One of our rotor pilot's daughters lives here. Her parents live here, her dad and mom live here. Her dad's not going anywhere and her mom's not going anywhere. Her mom and her are tied together at the hip. She's a PCP. I bet you if we trained her from PCP to CCP, she's 19 years old, 20 years old. We would have her until the end of her career, probably in Thunder Bay."

Recruit

Community / Place
Engage local communities&health system partners to develop recruitment strategies. Examine strategies to address spousal&family impacts for staff in Northern/rural settings.

"Depending on how you're trying to recruit and who you're trying to recruit, you're not just recruiting that person, you're recruiting their spouse and their family. So if you totally neglect the spouse and the family in the recruitment or in how you recruit the individual, you will lose that individual very quickly."

Role / Career
Increase recruitment efforts, early in paramedic education, in Northern rural and remote communities.

"Ornge should have a system developed for recruitment where they ... start recruiting at the college PCP level ... having a team of recruiters that go in at the beginnings of the college PCP course and explain a system to all of the students... Thereby ... being able to recruit locally from places like Northwestern Ontario"

Workplace / Organizational
Invest in supports for relocation and community integration for "new to the North" Ornge staff.
Increase transparency in the application process.

"People have to have a sense of community. So if you're coming up here, like if you're leaving your family, everything you've known...and you come up here and you never feel that sense of belonging... you're probably not going to stay, right? So one of the things they had suggested in a couple of them was mentoring some of these people that come in."

Retain

Community / Place
Recruit staff with roots in Northern, rural and remote communities = ↑ likelihood of retention, promote a cultural/contextual relevance of service delivery.

"And so that was my progress as a northern boy. I married a girl from Thunder Bay here and we have raised our family here. And so I guess I'm sort of the prototypical example of the kind of person that Ornge wants to hire to stay in the north."

Role / Career
Create professional development pathways and career trajectories only available to Northern paramedics.

"So I want to go to a conference, I got to pay Friday and Saturday, maybe Sunday night hotels where [Southern medic] can just drive there. So education opportunities are a little bit easier down south. Plus, if you want to do a master's program or go on, work in the helicopter and the trucks, you're in base a lot more and you can have more opportunity to study."

Workplace / Organizational
Recognize/incentivize contributions of Northern paramedic workforce: compensation packages, vacation time&seniority for time worked at a Northern base.

"And so when you're resource limited, and this is again, it's not conducive to family living...And it would be OK if there was an empathy to that, or we're going to help you. We recognize that it's hard on your family. We're going to offer you supports, whether that's financial, right? To allow for the cost of extended childcare or last-minute emergencies, right? I think, unfortunately, it's a feeling of being devalued as a human, as an employee."

Conclusions

This study explored paramedics' insights into recruitment and retention at Ornge, specifically in Northern Ontario. Our team identified themes to enhance workforce policies at regional and provincial levels. Northern Ontario recruitment strategies, education pathways, and a health equity emphasis are important to ensure a strong critical care paramedic workforce, and equitable access to care for Northern Ontario communities.

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Post-Natal Care for Newborns in the Post-COVID-Pandemic Era : A Descriptive Longitudinal Analysis Exploring Access to Primary Care for Infants Born at the Montfort Hospital in Ottawa, ON

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Montfort
Hôpital universitaire
Academic Hospital

01. Context

In 2023, over one in five Canadians (~6.5 million), did not have a regular family physician or nurse practitioner - a stark increase from the pre-pandemic 4.5 million (15%) in 2019.[1] With this growing gap in care, newborns' access to routine and continuous primary care may be impaired at a critical period for growth and development. Currently, there is a gap in the available research characterizing the impact of this issue on the newborn population.

02. Objectives

Quantiative

- To survey parents of babies born at l'Hôpital Montfort (HM) at regular intervals to capture patterns in healthcare utilization during the first 2 years of life.
- To explore the relationship between newborns' patterns of access to primary care and social determinants of health such as language, immigration status, and socioeconomic status.

Qualitative

- To assess the value of sharing digital health information messages with families at regular intervals to offer anticipatory guidance.

03. Methodology

- **Study Design:** Longitudinal mixed-methods prospective cohort study. The preliminary data on this poster is from a pilot study, and also part of an overarching project in which recruitment will continue until April 2026.
- **Setting:** Hôpital Montfort Family Birthing Centre, Ottawa, Ontario

- **Outcome and Analysis:**

Quantitative

Primary Measures:
- *Timing and frequency of routine well-child checks*
- *Rate of uptake of standard pediatric vaccinations*

Secondary Measures:
- *Rate of primary care attachment*

Qualitative

Utility of health information sheets

Descriptive statistics were employed to illustrate the distribution of access to a primary care provider (PCP), the uptake of routine vaccinations, and the frequency with which medical care was sought

Comments obtained from families were analyzed using Thematic Analysis

Scan the QR code below to get a glimpse of the health information sheets sent to families.

04. Preliminary Results

- 181 of 521 families completed the survey at 2 months → final sample size of 97 after including only those who completed the survey at all three time points (2, 4, and 6 months), at both 2 and 6 months, and at both 4 and 6 months
- Majority of the sample reside in Ontario, are non-racialized White, and hold Canadian citizenship (Table 1)
- Overall comparisons of the prevalence of PCP access across all three time points were statistically significant, indicating a change in access over time (Q = 12, p = 0.002). A pairwise test revealed a statistically significant difference between 2- and 6-month postnatal access (Figure 1)
- Majority of those with access to a PCP sought medical consultations and routine vaccinations at medical-based services across all three time points (Figure 2 and 3)
- Majority of those without access to a PCP sought medical consultations at community-based centres at 2 and 6 months, and routine vaccinations were provided at community-based public health centres at all three time points (Figure 2 and 3)
- Although the information provided was largely found to be useful (Figure 4), thematic analysis of 56 open-ended comments revealed both positive feedback and potential areas for improvement

Characteristics	
Mother's age, mean (SD)	32.7 (4.24)
Region of residence, n (%)	
Ontario	83 (85.6%)
Quebec	14 (14.4%)
Race, n (%)	
Non-racialized	60 (61.9%)
Racialized	17 (17.5%)
Missing	20 (20.6%)
Immigration Status, n (%)	
Canadian Citizen	70 (72.2%)
Non-Canadian Citizen	10 (10.3%
Missing	17 (17.5%)

Table 1. Baseline characteristics of the sample (n = 97)

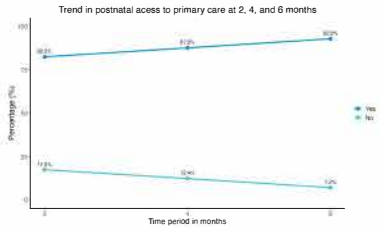


Figure 1. Line plot displaying the trend in postnatal access in the first 6 months post-birth

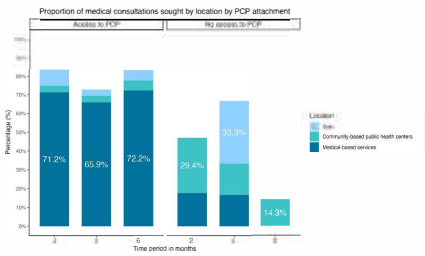


Figure 2. Bar plot showing the proportion of medical consultations by location among participants with and without attachment to a primary care provider (PCP)

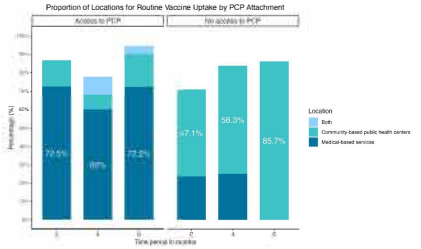


Figure 3. Bar plot showing the proportion of locations where routine vaccinations were received among participants with and without attachment to a primary care provider (PCP)

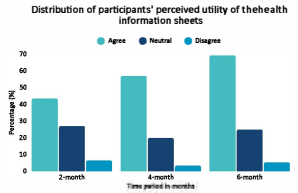
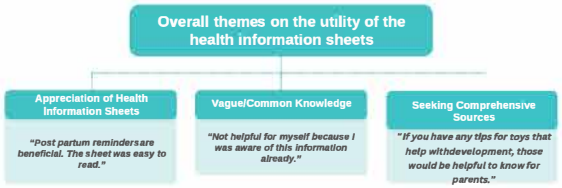


Figure 4. Distribution of families' perceived utility of the health information sheets based on the following prompt: "I found this information sheet to be valuable"



05. Discussion

Feasibility

- We anticipate reaching a response rate threshold of at least 40% by the end of recruitment.
- There remains the potential for selection bias (affluent families responded).

Qualitative Results

- Email is an appreciated mode of communication.
- We should include more specific evidence-based resources to improve access.
- We will continue to edit health infographics as we receive feedback.

Quantitative Results

- There is an increasing trajectory in newborns' access to primary care providers during the first six months after birth
- By six months, participants without access to a PCP primarily obtained vaccinations and sought medical consultations at community-based centres.

06. Next Steps

Recruitment is ongoing until 2026 and data collection is still ongoing until 2028. By then, we aim to better characterize the landscape of newborn access to primary care. A qualitative project is also underway with the aim of adapting our health information messaging to better meet the needs of families via semi-structured interviews.

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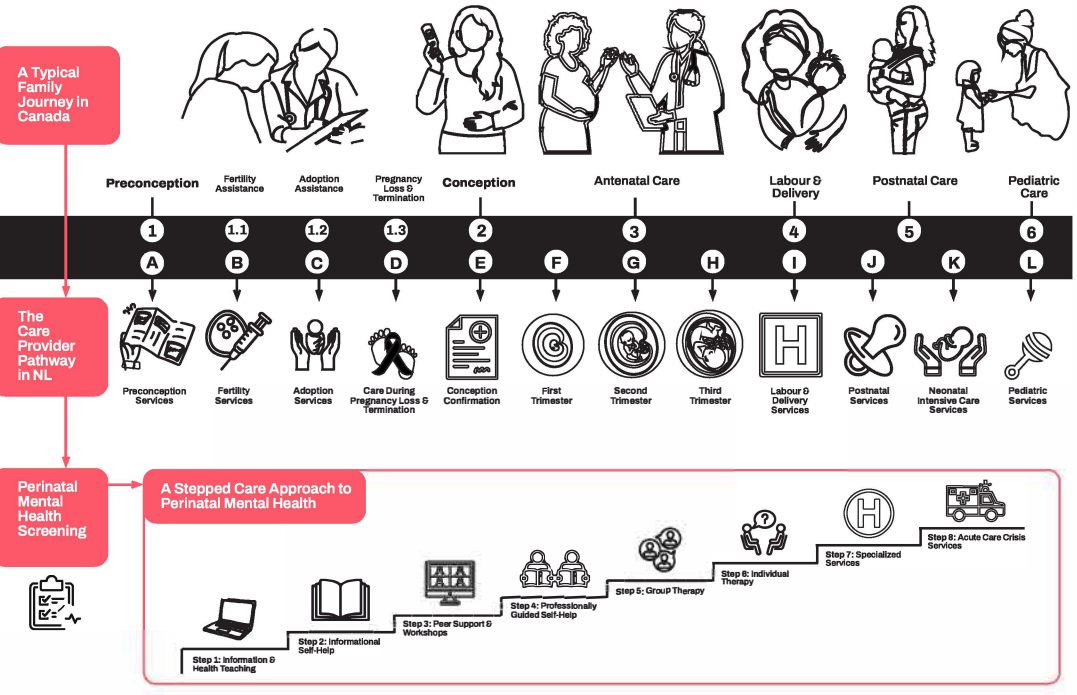
Centring Primary Health Care in the Advancement of Perinatal Mental Health
in Newfoundland and Labrador



Abstract

Primary health care is the locus for perinatal care across Canada. Perinatal mood and anxiety disorders (PMADs) are the predominant perinatal medical complication, with a national average of 23%. This primary care issue disproportionately impacts Newfoundland and Labrador (NL), which has a 28% provincial average. Led by the Daymark Foundation, a collaboration comprised of government leadership, policymakers, health experts, and people with lived experience, is mobilizing to enhance perinatal mental health through primary care.

Through the creation of a digital hub for service providers and users, and enhanced education and training for health practitioners, this initiative aims to reduce barriers to accessing care by facilitating timely access to perinatal mental health information and care along a stepped-care continuum. In partnership with local primary care clinics, this pilot is implementing routine screening, using the validated Edinburgh Postnatal Depression Scale (EPDS); educating health practitioners to identify needs early; facilitating referrals to community programs, including peer supports; and implementing the 2024 CANMAT Guidelines for PMADs. By co-creating and rigorously evaluating the model of care at local clinics, the goal of this project is to learn, refine, and scale provincially across all primary care sites in NL, and serve as a model for other provinces. Pilot evaluation results are expected in 2026.

This poster presentation provides a project overview, including a visual depiction of a family journey through the perinatal period, a service provider journey supporting birthing persons, and a stepped-care approach to enhancing perinatal mental health.

Creating a New Digital Hub for Perinatal Mental Health

Focus on Families:
- ✓ Self-monitoring capability
- ✓ Psychoeducation material
- ✓ Referrals to local mental health services and supports

Focus on Care Providers:
- ✓ Digital clinical assessments
- ✓ Perinatal mental health training material
- ✓ Guidance for provision of care

A Typical Family Journey in Canada

It's important to remember that each person's journey through the perinatal period is unique and each person has their own needs during their experience; these are some typical points along the journey.

1) Preconception: When a woman or birthing person is considering having a baby, as a first step, they may speak with their primary care provider or family doctor to obtain information about the journey ahead. A person without a primary health care provider may start trying to conceive on their own, and consult publicly available information, such as books, websites, and apps. Throughout their journey, some individuals may access additional health care professionals, either through a publicly funded service such as public health nursing, or a privately funded service such as naturopathic medicine.

1.1) Fertility Assistance: 11-15% of Canadian couples experience infertility, where they have had trouble with conception even after trying to conceive for a year. 1 in 7 couples (~15%) seek medical help, such as fertility treatments. Among these couples, 42% report using fertility-enhancing drugs, and 19% report using assisted reproductive technique (ART), such as in vitro fertilization (IVF). Access to fertility services and treatments vary across Canada. Ontario, Quebec, Manitoba, Nova Scotia, Prince Edward Island, New Brunswick, British Columbia, Yukon, and Newfoundland & Labrador all offer some form of public funding or tax relief for fertility treatments. Alberta, along with the Northwest Territories and Nunavut, currently do not provide provincial financial support for these services.

1.2) Adoption Assistance: Some families are formed through adoption, which is the legal process of permanently transferring parental rights and responsibilities from a child's biological parents to adoptive parents, who then assume the child's care as their own. This process severs the legal parent-child relationship with the birth parents and establishes a new, lifelong legal relationship with the adoptive parents.

1.3) Pregnancy Loss & Termination: Pregnancy loss is a common occurrence in Canada, with approximately 15-25% pregnancies ending in miscarriage. With regards to pregnancy termination/abortion, in Canada, these procedures are legal at all stages of pregnancy. Access to termination/abortion services vary by province and region, with services concentrated in urban areas. While termination medications (e.g., Mifegymiso) are generally available up to about 9–11 weeks of pregnancy, late-term procedures (after about 24 weeks) are limited and only accessible in specialized centres in British Columbia, Ontario, and Quebec.

2) Conception: Conception is detected by the presence of Human Chorionic Gonadotropin (hCG), the hormone produced during pregnancy by the placenta. Although some pregnancies can be detected through a urine sample as early as 10 days after conception, most pregnancies are confirmed by a blood test and/or ultrasound at about 4–6 weeks after conception.

3) Antenatal Care: Most pregnancies span 9 months, and the pregnant person may access a variety of health services at each trimester. Across Canada, pregnancy care is typically provided by a primary care provider, family doctor, obstetrician and/or midwife. Routine fetal monitoring may occur in each trimester, including screening for common prenatal health issues, such as gestational diabetes. Some individuals may choose to access private health care services during pregnancy, such as massage therapy, physiotherapy, and naturopathic medicine.

4) Labour & Delivery: Typically, babies are delivered at 37-42 weeks of pregnancy. Approximately 96% of births in Canada occur in hospitals, about 1.2% happen at home, and about 0.6% take place in birthing centres. Across Canada, approximately 70% of births are through vaginal delivery and 30% through caesarean (C-section). Babies are delivered by obstetricians and midwives, with support from nurses, and sometimes doulas where available.

5) Postnatal Care: Immediately after the delivery, care is provided to the baby, including routine screenings and vaccinations, often by public health nurses. Care for the mother or birthing person typically happens immediately after the delivery, and during the first week post-delivery, often by an obstetrician, primary care provider, family doctor, midwife, or a doula where available. Often there is a follow-up visit with a primary care provider for the baby and mother within the first week, and then again 6 weeks later.

6) Pediatric Care: Although pediatric care varies across Canada, children are provided with routine monitoring at each stage of their development, often by a pediatrician, primary care provider or family doctor. Care provided may include screening for common health issues and routine vaccinations. Families may also engage a variety of public and private health care services, including dentistry, optometry, and speech language pathology.

The Care Provider Pathway in NL

A) Preconception Services: In NL, the preconception phase offers the opportunity for primary care providers to engage individuals and families on important health issues such as contraception and reproductive health, fertility, child and maternal health, as well as perinatal mental health.

B) Fertility Services: In NL, a person who has been trying to conceive for 2+ years, or has been assessed as high risk for fertility issues, maybe referred to the Newfoundland & Labrador Fertility Services in St. John's. Although a provincial government-funded fertility subsidy is available, if the birthing person requires specialized fertility services (such as IVF), they may need to travel outside of the province to access those services.

C) Adoption Services: In NL, adoptions are facilitated by the Department of Children, Seniors, and Social Development. Currently, there are no private adoption agencies in NL. To adopt a child under the age of 24 months, the provincial waiting period is approximately eight years depending on the number of infants available for adoption. To adopt a child over the age of 24 months, the provincial waiting period depends on the number of older children available for adoption. Older children available for adoption are usually in the continuous custody of the Department of Children, Seniors and Social Development.

Applicants may apply to adopt a child from a foreign country and meet the requirements for adoption under the *Adoption Act, 2013* for Newfoundland and Labrador. They must also meet the requirement of the country from which they choose to adopt a child. Applicants typically use a private adoption agency licensed in Canada and the foreign country to help facilitate this complex process. Currently, there are no private agencies in NL and applicants engage agencies located in other provinces.

D) Care During Pregnancy Loss & Termination: In NL, an individual may consult their primary care provider and receive appropriate care, including referral for bloodwork and ultrasound, and be referred to an appropriate procedure at a hospital. Individuals may also engage telemedicine provided by a nurse (by calling 9-1-1), emergency services (by calling 9-1-1), and/or attend the local hospital emergency department.

Clients of the Family Centre Maternity Care Clinic may receive medical counselling regarding the miscarriage/loss in follow-up appointments.

When a patient decides to terminate a pregnancy, or for a medically recommended termination, services are available only in St. John's at the Athena Clinic, or they may access these services outside of the province. Late term terminations beyond 15 weeks gestation are currently not provided in NL.

E) Conception Confirmation: In NL, pregnancy confirmation is typically conducted by the primary care provider through urine analysis, bloodwork and ultrasound. A hospital emergency department may also confirm a pregnancy.

F) First Trimester: After a pregnancy is confirmed, the primary care provider will typically refer the individual to an obstetrician; however, some obstetricians may not begin to support the individual until 30 weeks. Individuals with low-risk pregnancies can also be referred, or they can self-refer, to Family-Centred Maternity Care Clinics, beginning 10 weeks. If conceived through fertility treatment, the individual will typically continue to be supported by the fertility clinic, under the care of obstetricians.

G) Second Trimester: In NL, an anatomy ultrasound is provided to the individual at 20 weeks, and gestational diabetes screening provided at 24 weeks, both typically in a hospital setting. An optional appointment with a public health nurse is offered at 28 weeks, including the provision of the Tdap vaccination (for tetanus, diphtheria, and acellular pertussis or whooping cough), and the Edinburgh Postnatal Depression Scale (EPDS) screening.

H) Third Trimester: By the third trimester, over 90% of pregnant individuals in NL are under the care of an obstetrician. Follow-up visits occur bi-weekly beginning 30 weeks, and weekly visits begin at 36 weeks. If living in rural areas of the province, the individual may need to relocate to an area where there is a hospital during their third trimester.

I) Labour & Delivery Services: All deliveries assisted by a health care provider occur in hospitals in NL, and regulated health professionals are not legally permitted to assist with home births, often referred to as "free births." Two thirds of all births in the province happen at the Health Sciences Centre hospital in St. John's; and approximately 10% of families that deliver at the Health Sciences Centre are supported by the Family-Centred Maternity Care Clinics, while 90% are followed by an obstetrician and hospital staff.

J) Postnatal Services: In NL, the individual typically remains in hospital for 24-hours after a vaginal delivery, 48 hours after a C-section, and longer if there are medical complications. Postnatal care is primarily provided by nursing staff, and lactation consultants may be engaged if available. Primary care providers resume follow-up care within the first week of the birth, for both the birthing parent and the baby; and there is a routine follow-up visit with the obstetrician 6 weeks after the birth.

K) Neonatal Intensive Care Services: The Janeway Clinic in St. John's provides comprehensive neonatal care for babies with medical complications. In these cases, the birthing person is also provided with increased nursing care, lactation supports and postpartum care at this clinic. Parents are not permitted to stay overnight onsite, rather, they are permitted to be with the baby only during visiting hours; however, depending on the baby's longer-term needs, parents may be permitted overnight access.

L) Pediatric Services: Prior to or upon discharge from hospital, the family is assigned a public health nurse who may check in by phone or provide a home visit during their first week home with the baby. During this visit, the nurse may provide the parents with resources and guidance on baby care and breastfeeding. The nurse may also complete the EDPS screening. The level of involvement with the nurse past the first visit varies based on the family's needs and/or desire to work with the nurse. Children are provided with follow-up visits with the nurse for routine immunizations and developmental check-ins at 8 weeks, 6 months, 9 months, 12 months, 18 months, 2 years, and 4 years.

A Stepped Care Approach to Perinatal Mental Health

At any point in the family journey, a care provider can complete the Edinburgh Postnatal Depression Scale (EDPS) screening with the birthing person and direct the individual to appropriate services along the stepped care continuum. This approach is adapted from the York Region Perinatal Mental Health Pathway (2023).

Step 1: Information & Health Teaching – Care provider offers information and supports mental health literacy.

Step 2: Informational Self-Help – The individual engages activities that involve as small level of commitment and interaction but are self-directed, done at the person's own time and pace, with minimal investment.

Step 3: Peer Support & Workshops – People with lived experience provide mental health support through sharing and active listening. This can be both formal (trained) and informal (not trained). Peer support can be mental health focused, or general support that provides opportunities for social connection. Workshops are educational and informative. There is a commitment required from the participant, and planning and skill required of the workshop facilitator.

Step 4: Professionally Guided Self-Help – This is a blended care model that involves both self-directed reading and resources, plus regular support from a care provider like a coach, social worker or other type of professional, either online, by phone, or in-person.

Step 5: Group Therapy – Group psychotherapy involves regular and ongoing participation for a set number of sessions. A level of commitment is required of the individual and the group is led by a professional.

Step 6: Individual Therapy – One-on-one counselling and psychotherapy support from a primary care provider, social worker, psychologist or other professional.

Step 7: Specialized Services – Specialized mental health programs and services available in a community-based agency or outpatient program in a hospital (non-urgent care).

Step 8: Acute Care Crisis Services – Engaging crisis services by calling 9-1-1 and accessing urgent care in a hospital emergency department.

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Daymark Foundation

Transitioning Medically Complex Youth from Pediatric to Adult Care

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BACKGROUND

- As youth with complex healthcare needs transition from pediatric to adult care, primary care providers (PCPs) play a vital role in ensuring continuity of care.
- The Transition to Adult Care (TAC) Program at Sick Kids is a hospital-wide program aimed to enhance health outcomes of youth with complex healthcare needs through supporting safe and secure attachment to PCPs and adult subspecialists.
- It offers a holistic youth and caregiver-centered approach that integrates navigational support, addresses social determinants of health, physical & psychosocial health needs, and leverages community resources to promote continuity into adult care.

APPROACH

- TAC program development was informed by provincial quality standards, an environmental scan and knowledge user engagement (people with lived experience, PCPs and adult subspecialists).
- The program offers transition specific support to youth, caregivers and providers for approximately 2-3 years, including 1 year post-transfer.
- Evaluation is based on measures of feasibility and usability, health service utilization, costs and patient reported outcomes.

RESULTS

- Preliminary findings indicate the value the TAC team adds to the transition continuum and successful transition to adult services.
- The TAC team helps to enhance PCP's access to information, support transition related tasks and facilitate communication and connection with PCPs (Figure 1).
- Further opportunities to partner with adult care continue to be explored.

CONCLUSIONS

- Early engagement, flexible post-transfer support and close partnership with youth, caregivers and providers are key to facilitating sucessful transition through personalized and holistic support.
- These insights help to inform iterative cycles of improvement in the approach to transition with youth, families, community partners, adult subspecialists and PCPs.

Collaborative, team-supported transitions which partner with primary care providers, youth and families are associated with improved satisfaction and stronger attachment to adult services

		SUPPORTED THROUGH
STRENGTHENING COLLABORATION TO SUPPORT ATTACHMENT	PCPs are **essential partners** in ensuring **continuity and attachment** for medically complex youth transitioning to adult care.	• Formal handover from pediatric services to PCPs • Facilitating appointments and connection to adult resources • Proactive planning with PCPs, including emergency care strategies
ENHANCING ACCESS TO CLINICAL INFO	For PCPs to feel **comfortable and confident** to provide quality care, **access to relevant health information** is integral.	• Bridging pediatric and adult care by supporting PCPs with access to historical information • Sharing insights into effective past care strategies • Continued involvement post-transfer
FOSTERING TRUST & CONNECTION	Positive **communication pathways** between PCPs, youth and families foster **trust and sustained engagement.**	• Individualized transition planning to reduce fragmentation • Coaching youth and families in healthcare communication, self-management and building relationships with the PCP • Setting expectations of shifting responsibilities, time and resource constraints in adult care
REDUCING BARRIERS TO IMPROVE ACCESS & ENGAGEMENT	Reducing barriers for youth and families **strengthens the foundation** for sustained PCP access and attachment.	• Collaboration with community services to expand support networks • Addressing caregiver burden and using a trauma informed care approach • Assisting with complex transition related administrative tasks

Figure 1. Description of TAC activites that support transition outcomes thtough patnership with PCPs, youth, and families.

Ontario Quality Health Transitions from Youth to Adult Healthcare Services

Health Hub in Transition

UNIVERSITY OF TORONTO SickKids | Transition to Adult Care Program

Dr. Alene Toulany, Medical Director: alene.toulany@sickkids.ca

Episodic Virtual Care:

Patient experiences by medical complexity and provider attachment

HEALTH SYSTEMS RESEARCH LAB

Authors

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Background

- Virtual primary care services have rapidly expanded in Canada through corporate investment in online, walk-in style platforms.
- Episodic virtual care (EVC) offers timely access to care but lacks continuity for ongoing management and coordination.
- Nova Scotia and New Brunswick have publicly funded EVC through provincial insurance to address primary care gaps.

Objective

We investigated **patient experiences with EVC**, considering differences by access to a regular family physician (FP) or nurse practitioner (NP) and self-rated complexity of medical needs.

Method

We used a mixed methods design:

- **Participants:** Adults (≥18) in Nova Scotia or New Brunswick who reported EVC use in the past year.
- **Data source:** Descriptive and exploratory online questionnaire about health access, needs, EVC use, and demographics.
- **Analysis:** We analyzed quantitative data descriptively and stratified by attachment status and medical complexity. Free-text responses underwent inductive content analysis.

Table 1. Summary of EVC visits

	Currently have FP or NP		Do not have FP or NP		Total
	Fairly routine needs (n=1,344)	Complex needs (n=279)	Fairly routine needs (n=1,116)	Complex needs (n=237)	(n=2,976)
Purpose of EVC visit, n (%)					
For your own health needs	1,082 (83.6)	236 (89.4)	1,032 (93.8)	213 (91.8)	2,563 (88.7)
For someone you care for	206 (15.9)	27 (10.2)	64 (5.8)	18 (7.8)	315 (10.9)
Method to communicate, n (%)					
Video call	63 (4.7)	18 (6.5)	115 (10.3)	33 (13.9)	229 (7.7)
Audio/phone call	147 (10.9)	42 (15.1)	113 (10.1)	31 (13.1)	333 (11.2)
Chat or text messages	873 (65.0)	154 (55.2)	583 (52.2)	117 (49.4)	1,727 (58.0)
Multiple ways	202 (15.0)	48 (17.2)	275 (24.6)	49 (20.7)	574 (19.3)
Type of clinician, n (%)					
FP	356 (26.5)	79 (28.3)	277 (24.8)	60 (25.3)	772 (25.9)
NP	716 (53.3)	118 (42.3)	665 (59.6)	125 (52.7)	1,624 (54.6)
Unsure	215 (16.0)	66 (23.7)	147 (13.2)	47 (19.8)	475 (16.0)
Purpose(s) of visit, n (%)					
Minor short-term health concerns	877 (67.7)	140 (53.0)	324 (29.5)	49 (21.1)	1,390 (48.1)
Ongoing health condition	83 (6.4)	56 (21.2)	213 (19.4)	77 (33.2)	429 (14.9)
Mental health concerns	35 (2.7)	13 (4.9)	54 (4.9)	29 (12.5)	131 (4.5)
Prescription renewal	169 (13.1)	51 (19.3)	440 (40.1)	92 (39.7)	752 (26.0)
New prescription	186 (14.4)	47 (17.8)	129 (11.8)	48 (20.7)	410 (14.2)
Referral for lab or diagnostic test	96 (7.4)	24 (9.1)	249 (22.7)	65 (28.0)	434 (15.0)
Referral to specialist physician	45 (3.5)	17 (6.4)	110 (10.0)	51 (22.0)	223 (7.7)

Table 2. Experiences during EVC visits

	Currently have FP or NP				Do not have FP or NP				Total	
	Fairly routine needs		Complex needs		Fairly routine needs		Complex needs			
	M	SD	M	SD	M	SD	M	SD	M	SD
Accessing the appointment										
It was easy to request a visit	4.33	0.98	4.04	1.14	4.07	1.11	3.65	1.20	4.14	1.09
The wait time was reasonable for me	4.29	0.97	4.05	1.06	3.91	1.13	3.52	1.29	4.06	1.10
The physical location was convenient	4.50	0.85	4.27	1.00	4.28	0.95	3.87	1.24	4.34	0.96
Experience of care										
The clinician understood and responded to my needs and concerns	4.37	1.01	4.03	1.23	4.16	1.04	3.61	1.30	4.19	1.09
The clinician communicated in a way I could understand	4.43	0.92	4.20	1.08	4.25	0.97	3.83	1.18	4.29	0.99
I was involved as much as I wanted to be in decisions about health/treatment	4.31	0.99	4.12	1.15	4.11	1.06	3.63	1.33	4.16	1.08
I trusted the clinician's advice	4.31	1.02	4.04	1.20	4.12	1.06	3.63	1.35	4.16	1.09
Experience of technology										
The technology was easy to use	4.22	0.96	3.94	1.14	3.98	1.07	3.79	1.11	4.07	1.05
The technology met my accessibility requirements	4.47	0.83	4.23	1.03	4.32	0.86	4.06	1.05	4.36	0.89
Follow-up information										
I was satisfied with the information provided during the visit	4.21	1.14	3.82	1.36	3.95	1.19	3.33	1.43	4.00	1.23
I was satisfied with any referrals I received	4.04	1.26	3.59	1.46	3.72	1.34	3.15	1.49	3.78	1.36
Overall experiences										
The visit met my needs	4.21	1.22	3.78	1.45	3.95	1.29	3.25	1.56	3.99	1.32

Results

- Quantitative data showed mostly positive experiences, with EVC improving access and largely addressing health concerns.
- EVC was most favourable among people with existing access to a regular FP or NP and routine health needs.
- Free-text responses highlighted mixed experiences, with some users frustrated by technological barriers (e.g., describing symptoms via text, uploading images) and preferring in-person care.

Conclusions

- We identified **mixed experiences** among EVC users.
- EVC improves primary care access, but lacks the continuity needed for long-term chronic care management.
- EVC may complement in-person services but is insufficient on its own to resolve primary care access challenges.

The visit was very short. It did what was needed for my acute care requirements [...] but I didn't feel a long-term connection needed to get continuous, preventive care that I would get from a family doctor.

- P4018, not attached, routine needs

Study protocol

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Bridging the care gap between diagnosis of hypertensive disorders of pregnancy and prevention of future cardiovascular disease

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INTRODUCTION

- Cardiovascular and hemodynamic changes associated with hypertensive disorders of pregnancy can persist post-pregnancy and predispose patients to future cardiovascular disease (CVD) (1).
- Lack of patient and provider awareness of the long-term implications of HDP to cardiovascular health have hindered progress in preventative care (2).
- Black and Southeast and South Asian populations are at a higher risk than other populations for HDP and CVD, and socioeconomic disparities, inequities in access to care, systemic racism and healthcare provider bias continue to contribute to this increased risk (3,4).
- The Canadian Postpregnancy Clinical Network will soon release new Canadian guidelines that outline best practices for the prevention, screening and management of CVD risk after HDP (5).
- Team-based primary care is correlated with greater engagement with preventative health interventions (6).
- Interprofessional healthcare providers (IHPs) are well-positioned to provide patient education that takes into account social determinants of health, cultural differences and mental health challenges. IHPs are also well-positioned to promote health by using gender transformative principles to address the role of gender inequity in health (7).

OBJECTIVE

This project aimed to develop a clinically integrated and evidence-based interprofessional postpartum workshop (Post Pregnancy Heart Health (PPHH)) to provide education about post-pregnancy cardiovascular health for people with a history of HDP.

METHODS

Literature review of guidelines and best practices around post-pregnancy cardiovascular care in HDP patients.

↓

An interprofessional team including dietitians, a social worker, a diabetes nurse educator/health coach, family physicians, obstetrical medicine specialists, and persons with lived experience met regularly to discuss and develop a pilot workshop for people with a recent history of HDP.

↓

Interprofessional workshop pilot implemented virtually on October 24, 2024. Participants could attend workshop without participating in research study.

↓

Informed consent, demographic information and pre-workshop expectations collected from study participants.

↓

Post workshop feedback collected from study participants via post-workshop survey.

↓

Facilitators met to review workshop successes and areas for improvement. Feedback was used to improve the workshop and expand outreach.

↓

Second and third iterations of the workshop were held virtually on January 30, 2025 and September 25, 2005.

↓

Further iterations will be informed through team and participant feedback and stakeholder engagement. The next workshop is scheduled for December 4, 2025.

ITERATIVE PPHH WORKSHOP REFINEMENT

RESULTS: DEMOGRAPHICS

Demographic Information	Age	Race/Ethnicity (open-ended)	Sexual Orientation	Gender (open-ended)	Marital Status	Household Income	Education
Workshop Attendees (7)	Range: (27-39) Median: 34 Mean: 33	1 American 1 Canadian, British 1 Bi-racial White and Jamaican 1 Eastern European 1 Jamaican 1 Preferred not to answer 1 Unable to determine	3 Heterosexual 1 Preferred not to answer 1 Unable to determine 2 No answer due to technical issue	1 Cis Female 5 Female 1 Preferred not to answer	6 Married 1 Unable to determine	1 <19,000 supporting 2 1 60,000-70,000 supporting 5 1 120,000-150,000 supporting 4 1 >150,000 supporting 4 1 >150,000 supporting 3 1 >150,000 supporting 2 1 Unable to determine	3 Undergraduate 3 Postgraduate 1 Unable to determine

RESULTS: PARTICIPANT FEEDBACK

- **Knowledge gained**: average increase of 1.6 on a 5 point Likert scale
- **Confidence in making changes:** average of 4.3 out of 5 on a Likert scale
- **Likelihood to start a conversation with primary health care provider because of what was learned in the workshop:** 4.6 on a Likert scale of 1 (unlikely) to 5 (extremely likely)

Most important aspect of the workshop	Topics you'd like to learn more about	Suggestions for improvement
• Opportunity to ask questions to the team • Examples of things that participants could do to be healthier • How diet affects blood pressure • Stress management • Concrete diet recommendations • Understanding CVD risk factors	• Mental health • Intersection of race with postpartum health and targeted information for prevention • How to get more sleep • Hormonal changes and nutrition surrounding breastfeeding • Return to physical activity • How to explain health changes to partner • Warning signs • Preparing for future pregnancies	• More time to ask questions • More time for presentations • More of the science behind how preeclampsia affects the heart in the long term and short term • How to advocate for testing and preventative care • Evening and weekend workshops

DISCUSSION

ACCESSIBILITY

- Workshop held in the afternoon in order to align with nap time
- Virtual format to reduce barriers to attendance, e.g. transportation, time, child care
- Consider patient requests for evenings/weekends and 1:1 follow-up with funding and staffing constraints

WORKSHOP DESIGN

- Iterative development according to participant, patient partner and provider feedback
- Workshop format adaptable to participant characteristics, concerns
- Incorporate new postpartum physical activity, sedentary behaviour and sleep guidelines
- Workshop was extended from 1 ½ hours to 2 hours based on feedback
- Renew patient partner recruitment targeting equity deserving groups

OUTREACH STRATEGY

- Attendance lower than anticipated
- Future strategies: target high risk, equity deserving populations, create workshop referral pathway from Sunnybrook Women & Babies program, partner with community clinics (Vibrant Community Health, Don Mills Family Health Team, Seventh Generation Midwives)

STRENGTHS/AREAS FOR IMPROVEMENT

- Virtual can reduce barriers but less intimate than in person
- Able to reach more participants through group format but less opportunity to engage with participants individually
- Reaching people with a variety of HDP-related health concerns but cannot cover all details specific to each participant

SPREAD AND SCALE

- Create an implementation guide for primary care teams that is adaptable to local communities

CONCLUSIONS

The post-pregnancy period is a crucial window of opportunity for cardiovascular risk assessment and preventative care. An interprofessional workshop embedded in primary care provides one such opportunity.

ACKNOWLEDGMENTS

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Scan here for www.hearthealthmatters.ca

hearthealthmattershub

Rethinking the representational space of EHRs

A pathway for health care to advance with the design disciplines.

By Arnold Kim, Sabah Mohammed, Jinan Fiaidhi, Laila Ikki, Yash Amethiya

Connect with us!
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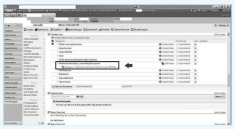
We are a physician lead team of software developers and researchers. Our team is composed of MSc graduate students, mentored by the professors of the computer science department at Lakehead University. We are happy to have been able to hire student researchers through the Mitacs Accelerate program.

Lakehead University · mitacs · NOSM University EMNO · Thunder Bay Regional Health Research Institute

Let's start a movement rethinking the representational / design space of clinical discrete and non-discrete concepts.

Complex clinical decision-making is at the forefront of modern medicine. Healthcare providers continue to juggle increasingly detailed discrete concepts (e.g., screenings, laboratory test results, clinical observations). The difficulty of this is exacerbated by the uncertainty and ambiguity concomitant with the discipline. During the diagnosis, treatment and management of medical conditions, the sheer volume of information that a healthcare provider must consider is colossal.

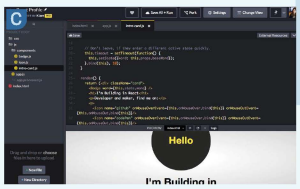
Over-dependence on static spatial allocation of widgets to delineate discrete data types causes display fragmentation and sacrificing portraying key relationships between them. Many healthcare providers report spending more time with pull-down menus than with patients[1].

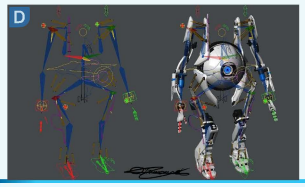


Disjointed medical data forces healthcare providers to retain information in working memory. This is known as cognitive load[2]. Performing such cognitively-straining processes in highly stressful and time-sensitive situations can lead to dissatisfaction, frustration, and burnout[3].

Healthcare providers are architects of the patient's treatment plan. Their job is to draft, propose, adapt, and revise medical plans.

Where other industries have streamlined the joint drafting capabilities of a multidisciplinary team, healthcare is lagging sorely behind.





We want to leverage existing aspects of modern design tools and apply them to EHRs. Here are some examples from other industries:

Image A: Engineers are able to draft blueprints from multiple perspectives with a 3D preview before committing to production. Predominant discrete concepts are spatial.

Image B: SQL as a DSL that models entity relationships with visualization. This is an example of concept modeling.

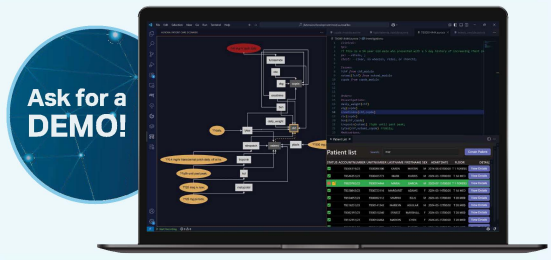
Image C: Software languages model data representations and algorithms, and balance expression of discrete and non-discrete. (Note the comments.)

Image D: Although CAD (computer aided design) began with engineering and other technical fields, today they pervade the arts. 3D software provides artists and technicians the ability to visually simulate all the complexities of our physical reality. The success of these programs lies in how they handle the advanced computations in the backend, allowing the user to focus on bringing their creative visions to life.

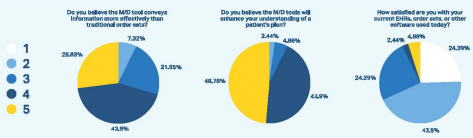
Introducing Aurora Constellations

The Aurora research prototype presents an alternative framework that is congruent with the clinical workflow and actively assists clinicians with live feedback.

Aurora uses a domain specific language (DSL) to unify the different components of traditional EHRs into one continuous workspace. The DSL is capable of capturing medical orders while simultaneously providing the expressiveness that would otherwise only be feasible in clinical documentation. We constructed a language specific to healthcare that not only captures what doctors do but is also machine understandable.



We demoed our prototype for 35 registered nurses and 6 medical doctors and asked for their feedback. *Feedback was requested on a scale of 1-5, 1 being the least and 5 being the most:*



Core principles we are introducing to EHRs:

Expressiveness
Formal discrete elements and their relationships are interleaved with supporting narrative.

Synthesis of Information
Information is displayed in a way that makes it easier to identify relationships between information. This is facilitated by an algebraic approach to composability of prebuilt protocols.

Collaborative Drafting
Healthcare is collaborative in nature. Traditionally, the clinical reasoning of members of the primary care team is buried in extensive clinical documentation. With Aurora, colleagues' contributions are contextualized against the overarching synthesis.

Magnification of Detail
Zooming between higher to lower level of detail, helps ease cognitive burden, prioritizing tasks and minimizes repetition. As an example, signover can be represented as a "zoomed out" view of the patient care model.

Contemporaneous Learning and Decision Support
Design environment provides reactive feedback to flag errors, as well provision integrated information resources to educate and support decision making.

A more comprehensive overview of the mechanisms that make our prototype possible will be discussed in an upcoming white paper. Featured in this report will be a commentary regarding the limitations of modern EHRs, as well as the software tools and concepts used to craft the prototype.

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Patient and Family Engagement in Population-Based Primary Care Research

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1. Background

Patient and family engagement in research is a robust and growing framework in Canada. Traditionally, this engagement involves including people with lived/living experience of health conditions and/or their family members on a research project team to shape research ideas, apply for funding, and execute the project over its lifetime.

The Eastern Ontario Network (EON), however, aims to meaningfully engage people with lived experience in the stewardship of big data holdings for population-based primary care research, rather than on a project-by-project basis.

EON: EASTERN ONTARIO NETWORK

The Eastern Ontario Network (EON), Queen's University practice-based learning and research network (PBLRN) is a network of over 150 primary care providers in practice at 15 clinics across Eastern Ontario. The network is a multidisciplinary collaboration between primary care providers, researchers, and community partners to answer important healthcare questions and translate findings into practice.

EON's goal is to enhance primary care through ongoing collection and application of primary care data for research and quality improvement

2. Approach

We utilized a collaborative approach with our patient and family partners to identify ways in they could be embedded within the core EON team:

Team meetings
Attending bi-monthly full team meetings

Content expertise
Provide review of key documentation for patient focus

Regular updates
Receiving news and opportunities through email

Representing EON
Sit on external committees (i.e. POPLAR Patient Engagement)

3. Results

Regular in-person and electronic communication helped to build strong and sustainable relationships between EON core staff and patient and family partners. To date, three partners are actively working with the EON team to support and direct key activities.

Research Project Review: Providing feedback and approval for potential projects using primary care data

Strategic and Operational Planning: Providing ongoing expert feedback and suggestions for the development and implementation of EON's Strategic Plan

Process Improvement: Ensuring patient, family and community perspectives are built into network policies, procedures, and research

Network Expansion: Identifying creative solutions to ongoing challenges including sustainable funding, recruitment, and effective knowledge translation

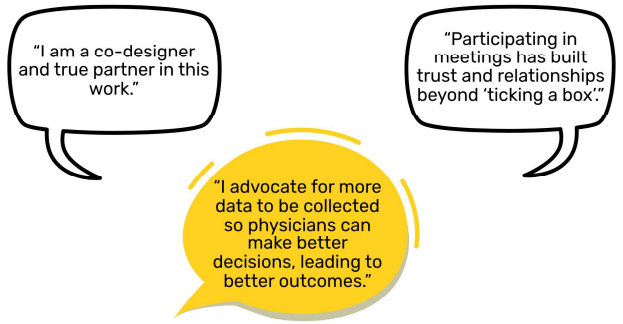

Figure 1: Our patient partner's words describe the impact he has on population-based primary care research

4. Conclusions

We rely on clinicians, researchers and people/families with lived experience to understand the problems patients in the region are facing and collaboratively design research questions to address these problems. Having a dedicated group of patients and family members who understand the data EON collects, and the types of questions we can answer with this data will be invaluable for timely and relevant population-based primary care research. With the success of collaboratively embedding partners into our work, we will use lessons learned to expand the inclusion of patient and family partners in population-based primary care research throughout Eastern Ontario.

Queen's University
EON Eastern Ontario Network
CSPC Centre for Studies in Primary Care at Queen's University

Finding Hidden Bruises: Designing an Educational Presentation on the Primary Care Approach to Intimate Partner Violence

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CENTRE FOR STUDIES IN PRIMARY CARE at Queen's University

Queen's University Family Medicine

Follow along with the audio-recoding!

Introduction

- Intimate Partner Violence (IPV): "Behaviour by a current or former intimate partner causing physical, sexual or psychological harm which may include physical aggression, sexual coercion, psychological abuse and/or controlling behaviours"[1]

1 in 4 women WORLDWIDE aged 15-49 years have been subjected to IPV by their intimate partner at least once in their lifetime.[1]

4 in 10 women in CANADA have experienced some form of IPV in their lifetime.[2]

- While women are disproportionately affected by IPV, anyone can experience IPV regardless of gender, race, ethnicity, education, socioeconomic status, age or relationship status.[3]
- IPV has significant impacts on:

PHYSICAL HEALTH[3] MENTAL HEALTH[3] ECONOMIC COSTS ($7.4 billion/year)[4]

- With longitudinal relationships with patients, family physicians can play a pivotal role in halting the cycle of abuse through screening and offering ongoing support. This can in turn increase safety and improve health outcomes for these patients.[5]
- However, the literature demonstrates longstanding low IPV screening rates by healthcare professionals, including in primary care (<10%).[6]
- Barriers to screening:[6]

Lack of Privacy | Time Constraints | Anxiety and Discomfort | Lack of Awareness | Lack of Training

The international screening controversy:

- United States Preventive Services Task Force: "Recommends that clinicians screen for intimate partner violence (IPV) in women of reproductive age and provide or refer women who screen positive to ongoing support services"[5]
- Canadian Task Force on Preventive Health Care : "There is currently insufficient evidence to recommend screening the general Canadian population for IPV or elder abuse"[7]
- World Health Organization: "Healthcare providers should ask about exposure to intimate partner violence when assessing conditions that may be caused or complicated by intimate partner violence "[8]

- Keren et al. (2023) identified that Canadian Family Medicine residents reported feeling inadequately taught and unprepared to care for patients experiencing sexual assault and domestic violence (SADV).[9]

Methods

STUDY OBJECTIVE: To develop an evidence-based and expert-reviewed educational presentation about the screening and management of IPV in primary care to be posted online as an open access educational resource.

PHASE I

PART 1 Needs Assessment of Queen's Family Medicine Residents

WHO: First- and second-year Queen's Family Medicine residents

WHAT: 10-question online survey exploring current training on IPV screening and management and learning gaps

HOW: Recruited through mass emails by program coordinators and WhatsApp group chats

PART 2 Interview of Key Informants

WHO: Five experts with professional experience in the field of IPV

WHAT:
- ~60-minute one-on-one interview over Zoom video conferencing
- Requested expert guidance on the content of the presentation
- Audio-recorded, transcribed verbatim, and imported into NVivo14 for analysis using an applied, qualitative descriptive thematic analysis

HOW: Recruited through email from authors' professional network

PHASE II

Creation of First Draft Presentation

WHAT: Creation of a first draft of the PowerPoint presentation

HOW: Based on a narrative review of the literature as informed by the survey responses of Queen's Family Medicine residents and key informant input

PHASE III

PART 1 Pre-testing By Key Informants

WHO: The same key informants from Phase I

WHAT: Critical review of a 1-hour dry-run recording of the draft presentation

HOW:
- The same process was used as in Phase I, Part 2
- A second draft presentation was created based on their input

PART 2 Post-presentation Survey by Grand Rounds Attendees

WHO:
- The second draft presentation was delivered in-person to all DFM staff (including allied health and admin staff)
- A post-presentation survey was requested from only the attendees who identified as residents and staff physicians

WHEN/WHERE: Grand Rounds at the Kingston and Thousand Islands site on November 19, 2024

WHAT: 15-question online post-presentation survey evaluating the presentation's effectiveness and content

PART 3 Creating the Final Presentation

- Based on the post-presentation survey responses, the authors edited the presentation
- The final version was video-recorded and posted online as an open-access educational resource

Results

PHASE I, PART 1: Needs Assessment of Family Medicine Residents

32 Family Medicine residents responded to the survey

78.1% reported currently selectively screening for IPV

81.3% reported learning about IPV in medical school

62.5% did not feel they received adequate training in medical school about IPV

How residents currently manage IPV:

- Compassion and Support: *"I'd validate them, thank them for sharing, [and] ask what they would like to do […]"* – Respondent #5
- Ensuring Patient Safety: *"I'd assess whether there is immediate danger, refer to emerg if there is, [and] if no immediate danger, […] ensure the] patient has [a] safety plan."* – Respondent #12
- Mandatory Reporting Obligations: *"It depends on their age, and if children or elderlies are involved but I address the issue and name it clearly. Then I ask their thoughts about reporting."* – Respondent #20
- Offering Community Resources: *"I'd] provide resources for shelter/ organizations who can provide help."* – Respondent #30

Categories	No. (%)			
	Not at all confident	Somewhat confident	Fairly confident	Very confident
Trauma informed Care Approach	3 (9.4)	14 (43.8)	12 (37.5)	1 (3.1)
Screening	3 (9.4)	19 (59.4)	8 (25.0)	0 (0.0)
Management	8 (25.0)	18 (56.3)	5 (15.6)	0 (0.0)
Reporting	12 (37.5)	12 (37.5)	4 (12.5)	1 (3.1)
Documentation	10 (31.3)	7 (21.9)	13 (40.6)	1 (3.1)
Referrals/Community Resources	8 (25.0)	19 (59.4)	1 (3.1)	2 (6.3)
Resources for self-directed learning	11 (34.4)	16 (50.0)	3 (9.4)	0 (0.0)

Table 1: Level of confidence of respondents with the different steps in the management of IPV in Phase I, Part 1 (n = 32)

PHASE I, PART 2: Interview of Key Informants

Themes	Quotes
Populations Affected by IPV	"I tend to talk about 'shes,' but you know that there are statistics indicating that women can be abusive too. It's just that given our social economic inequities, the consequences are often much worse for women and the childcare responsibilities too when that happens." – **Key Informant #1** "So one thing I was thinking about […was] just the importance of specific populations, […] For example, people with disabilities […] are more prone to [experiencing] violence […] The trans population as well, Just more marginalized [populations]." – **Key Informant #3**
Importance of Universal Screening	"I think we make a mistake in trying to be selective because my experience in practice is that it wasn't necessarily the people I expected who reported. And the worst case I had, I would not have anticipated it all." – **Key Informant #2** "We should universally screen for IPV, because it is a health issue. It can cause health issues, physical and emotional, […] Because some people are waiting almost for someone to ask, so they can disclose." – **Key Informant #5**
Letting the Patient Guide Their Care	"Because, unfortunately, what we need to realize is people […] have the right to make bad choices. […] And you know that they shouldn't go back to their partners, But they have that right to make that choice, because I don't know what may occur if they don't go back. Because I am not walking in their shoes. I can see on the surface is a really bad idea, because this might be the outcome. But the outcome may be even worse, if that's possible, if they don't go back." – **Key Informant #4** "Just making sure that, like, you're at every step kind of giving them some power back. And choice, and what they want to do so. And offering options is a big part of the trauma-informed piece too, like offering a few options and letting them pick." – **Key Informant #5**
Safety of Children Exposed to IPV	"Even if the children are never threatened themselves directly, […] young children are traumatized by this and it's bad for their emotional and psychological health. They might not be doing well in school, etcetera." – **Key Informant #1** "But if we think about the impact on children and what they're learning, then it just comes back with the focus on trying to prevent it for future generations. […] We really want kids to get the message that it's just not okay, So […] if they're really unsure, they call and do a back door [consult] and just say […], you know, is this something that's reportable? The intake workers are great." – **Key Informant #3**

Table 2: Key themes and quotes from key informants during interview in Phase I, Part 2

PHASE III, PART 2: Post-presentation Survey

11 Grand Rounds Attendees responded to the survey

54.5% did not feel they received adequate training in medical school about IPV

81.8% reported currently selectively screening for IPV

81.8% felt that this presentation will make a change to their practice

Categories	Before Presentation - No. (%)				After Presentation			
	Not at all confident	Somewhat confident	Fairly confident	Very confident	Not at all confident	Somewhat confident	Fairly confident	Very confident
Trauma Informed Care Approach	0 (0.0)	6 (54.5)	4 (36.4)	1 (9.1)	0 (0.0)	3 (27.3)	4 (36.4)	4 (36.4)
Screening	2 (18.2)	4 (36.4)	5 (45.5)	0 (0.0)	1 (9.1)	1 (9.1)	5 (45.5)	4 (36.4)
Responding to disclosure	1 (9.1)	4 (36.4)	4 (36.4)	2 (18.2)	0 (0.0)	1 (9.1)	6 (54.5)	3 (27.3)
Management	2 (18.2)	6 (54.5)	2 (18.2)	1 (9.1)	0 (0.0)	2 (18.2)	6 (54.5)	2 (18.2)
Reporting	1 (9.1)	4 (36.4)	5 (45.5)	0 (0.0)	0 (0.0)	0 (0.0)	6 (54.5)	4 (36.4)
Documentation	0 (0.0)	4 (36.4)	5 (45.5)	1 (9.1)	0 (0.0)	1 (9.1)	5 (45.5)	4 (36.4)
Referrals/Community Resources	3 (27.3)	2 (18.2)	3 (27.3)	2 (18.2)	0 (0.0)	1 (9.1)	5 (45.5)	4 (36.4)
Resources for self-directed learning	3 (27.3)	3 (27.3)	4 (36.4)	0 (0.0)	0 (0.0)	2 (18.2)	5 (45.5)	3 (27.3)

Table 3: Confidence level of respondents about screening and management of IPV both prior to and after the Grand Rounds presentation in Phase III, Part 2 (n = 11)

THE FINAL PRODUCT

Check out our open access educational video!

Discussion

KEY TAKEAWAY #1:

Despite ongoing debate, all interviewed experts supported universal screening for IPV—believing it leads to better health outcomes and patient safety when followed by proper intervention.

This aligns with U.S. Preventive Services Task Force:[5]
- Screening alone = *inconclusive benefit*
- But effective post-screening intervention = *reduced violence, abuse, and harm*

Access Challenges: Implementation of screening remains challenging in rural Canada due to limited local resources. Potential Solution: Improved access to telehealth and virtual care may help to bridge this gap.

KEY TAKEAWAY #2:

Identifying and managing SADV is a core competency for Canadian Family Medicine graduates.[10]

- In this study, residents reported low confidence in managing IPV due to limited prior training
- US & Canadian studies show family physicians often feel undertrained, anxious, and uncomfortable with IPV care[6,9]

Confidence improved among Grand Rounds attendees after the presentation, suggesting targeted education (e.g., CME, medical and residency curricula) can:

↑ Physician confidence ↑ Comfort with IPV screening and care

Conclusion

Strengths

Our rigorous academic process followed to create an expert-reviewed and evidence-based presentation

Limitations

1. Small sample size and lack of generalizability
2. Difficulty finding physician experts regarding IPV care

Future Directions

Further research will be needed to identify the best methodology for training to produce sustained behavioural change.

Home should not continue to be the most dangerous place.

Family physicians can play a crucial role in helping patients heal from abuse.

References & Acknowledgements:

The U-Path Study: Recruitment strategies & early findings from a community-based study of underserved populations in Nova Scotia

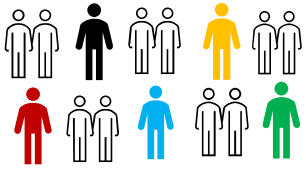
Abraham Munene PhD , Aishwarya Radhakrishnan MA, and Emily G. Marshall PhD

DALHOUSIE UNIVERSITY
DEPARTMENT OF FAMILY MEDICINE

nova scotia health

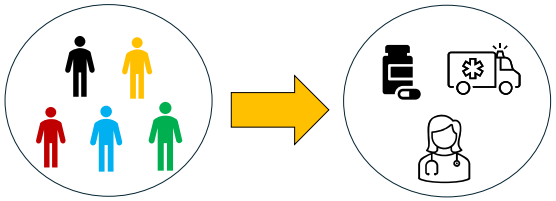
Background

- Historically, Persistently and/or Systematically Marginalized (HPSM) people are often excluded economically and socially by status, gender, class, race, ethnicity, age, sexuality, or "other" group identities
- HPSM populations face health inequities, disparities, and poorer access to healthcare services
- These challenges are associated with worse health outcomes and reduced quality of life



Objective

- The U-Path study aims to understand the needs and lived experiences of people belonging to HPSM communities within Halifax and Dartmouth Nova Scotia, with respect to their health needs, access to primary care, other health services, and community services

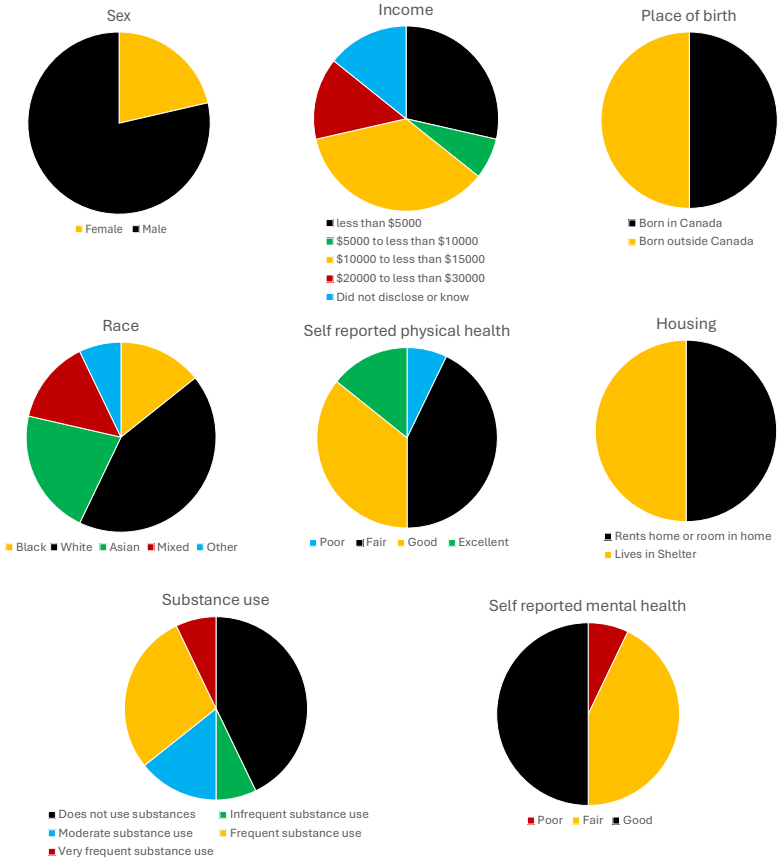


Approach

- 3-year multi-phase community based qualitative study
- Interviews with HPSM participants
- Interviews with primary care physicians who work with HPSM patients
- Recruitment via community organizations (e.g., shelters, street walks, YM(W)CA's, libraries, immigration and education organizations, and community clinics)

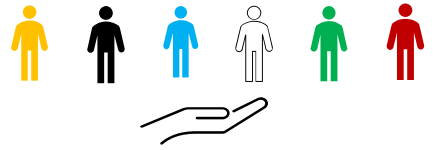
Preliminary Results

- Following our interview guide, 14 HPSM participants have participated to date, including 12 in-person and two phone interviews. Recruitment is ongoing.
- Recruitment goals included addressing HPSM lived experiences and their recommendations
- Interview sessions vary in length. The shortest interview was approximately 25 min and the longest over 2 hours



Conclusions

- While conducting research to understand the needs of HPSM people, it is important to reflect best practice in recruiting patients from underserved communities which includes unique challenges (e.g., participant and researcher physical and psychological safety, participant access and availability)
- Participants were provided with $25 compensation for their time
- Fostering and building relationships with community members is important for recruitment and data that can be shared with stakeholders in the hopes of improving their daily lives
- Observation and taking note of contextual factors surrounding participants situations while recruiting and during interview sessions should be considered
- Ethical obligations to share resources to participants across various needs and taking the time and effort to meet patients where they are, while being empathetic and non-judgemental to the needs, situations, and challenges they are facing is imperative
- Considerations towards both participant and researcher physical and psychological safety, e.g. conducting interviews in safe spaces such as libraries or coffee shop
- Examples include choosing locations that are safe and convenient to get to for participants. Taking time to familiarize yourself and build rapport with participants. Noting any changes in behaviour that may take place before, during, and after interviews. Modifying your questioning route, and ensuring researcher safety (e.g. two to one interviews, debrief sessions)



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Participatory Evaluation for System Change in the OECD PaRIS Project in Saskatchewan: Lessons in Recruitment and Engagement

Udoka Okpalauwaekwe, Brenda Andreas, Mark Lees, Nazeem Muhajarine, Vivian R Ramsden, and the PaRIS Saskatchewan Research Team

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Background

- The Organisation for Economic Co-operation and Development (OECD)'s Patient-Reported Indicator Surveys (PaRIS) Project was implemented in Saskatchewan in 2023 to center the voices of patients and providers using a standardized collection of patient-reported experience and outcome measures (PREMs and PROMs).
- Saskatchewan adopted a participatory approach to survey implementation, grounded in the philosophy that authentic engagement enhances data quality, relevance, and use.

Objectives

- This study evaluated how the participatory and relational processes shaped clinic and community engagement with the PaRIS Project and the resulting data

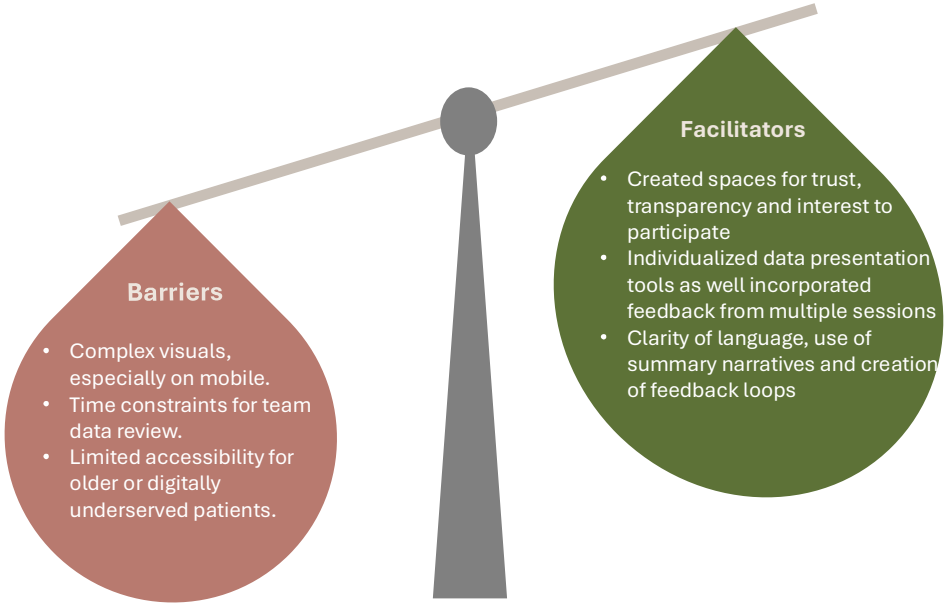
Approach

- This study was informed by an integrated framework of participatory evaluation and transformative learning; grounded in relational equity.
- Seven primary care clinics co-developed and received feedback dashboards.
- Key measures discussed in the participatory evaluation included: a) Response rates (PCPs and PWLE); b) Perceptions of dashboard relevance, c) Ease and relevance of use and interpretation, d) Identified data-to-practice linkages, e) Recommendations for future engagement and , f) data presentation/visualization strategies

Findings

- Early and trust-based engagement fostered strong participation, meaningful interpretation, and a sense of co-ownership.
- Participating clinics described the dashboards as empowering and validating.

Facilitators and Challenges in Engagement and Data Interpretation/Use



Opportunities for enhancing future primary care research

- Simplifying data visuals and optimizing presentation formats for mobile and/or low-bandwidth environments.
- Providing real-time feedback mechanisms, such as using tablets or research kiosks in clinic waiting rooms for ongoing data collection.
- Tailoring engagement and data dissemination strategies for multilingual or digitally underserved populations.
- Extending engagement timelines to facilitate the inclusion of and working with Indigenous communities, to ensure engagement processes are culturally appropriate and respectful for them to participate in.

Discussion

- Participation in PROMs/PREMs has been shown in studies to be influenced by a mix of practical, motivational, and relational factors, such as instrument design, ease of use, patient beliefs, clinician engagement, and workflow integration.
- However, our findings highlight that trusting, equitable relationships between patients and clinicians are the key facilitators that enhance motivation, follow-through, and meaningful engagement.
- Thus, relationships (i.e. relational equity) functions as the engagement enabling environment that links individual, organizational, and contextual drivers of participation; shaping co-ownership, belonging and sustainability of outcomes.

Conclusion

- Our study showed that early, inclusive, and trust-based engagement led to strong clinic participation, a sense of co-ownership of the data, and more willingness to use findings for internal reflection and quality improvement.
- Future directions of this work will build on the lessons learned to continue with co-creating more inclusive, culturally responsive, and sustainable approaches for engaging patients, health care providers and other stakeholders.

PaRIS Saskatchewan Research Team Members

Reem Abdul Hadi, Akram Abdulkareem, Bonnie Ast, Mahshid Bagheri, Shannon Bandura, Angela Baerwald, Michael Bayda, Candina Beaurivage, Doug Bell, Colleen Brockbank, Kali Gartner, Megan Clark, Kristin Canart, Danielle Chartier, Darren Chew, Claire Chao, Jeannie Coe, Cathy Cole, Holly Anne Cook-Laliberte, Ettiene Crouse, Starr Davis, Christine Dawson, Armaan Dogra, John Dosman, Nicole Dubois, Kris Dutchak, Crystal Litwin, Paula Paley, Rejina Kamrul, Leung Kwok, Kathy Lawrence, Dag Lawsie, Kevin Ledding, Faith Lubansa, Della Magnusson, Lorraine Manalac, Razawa Marcel, Radhika Marwah, Jessica Harris, Joan Hamilton, Jacelyn Hanson, Jason Husain, Boris Hencic, Martin Heroux, Alyx Holden, Carla Holinaty, Rachel Johnson, Sylvie Jones, Ginger Ruddy, Angela Lapetsky, Crystal Semple, Cassandra Pancyr, Meredith McKague, Darcie McGonigle, Reid McGonigle, Robin McMaster, Olivia Reis, Jessica Rivas, Angela Robinson, Erika Roets, Wessel Roets, Cheryl Zagozeski, Mark Tarry, Aaron Vanderlot, Andrea Vasquez Camargo, Rachel Gough, Brendan Groat, Sean Groves, Tracey Guselle, Hillary Gable, Asma Gargoum, Seema Goyal, Kevin Govender, Volker Rinisland, Clara Rocha Michaels, Bethany Rolfe, Arvinder Theathi, Bawan Taliuldar, Leane Pask, Jodi Parent, Payton Pederson, Rae Petrucha, Easan Sasitharj, Marty Salter, Herman Schalk van der Merwe, Gillian Treen, Cass Fallis, Jill Farrukh, Eleanor Francis, Danielle Frost, Joanna Fynn, Cindy Nylund, Lesley Shoemaker, Olivia Reis, Michael Nicholls, Buchi Nwodo, Sinisa Zerajic, Nicole Shedden, Erin Selzer, Tharshan Selestin, Solveig Nilson, Yan Wu, Caylee Holden, Morris Markentin, Hazel Javier, Twila Grona, Cathy MacLean, Andries Muller, Clara Rocha Michaels, Somto Ibezi, Aaron Prystupa, Meric Osman, Felecia Watson, Matt Kushneriuk, Ross Kerhoff, Isa Saidu

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Trends in attachment to family physicians among assisted living residents in Ontario, Canada: A home-level repeated cross-sectional study

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Health Research Methods, Evidence & Impact

St. Joseph's HEALTH SYSTEM
Centre for Integrated Care

Introduction

Retirement homes (RHs) (also known as retirement homes) in Ontario, Canada, are privately financed, supportive, and congregate residential care facilities for older adults. RHs are rapidly outpacing the growth of nursing homes, housing older adults with growing clinical and social complexity, including dementia, cancer, and congestive heart failure. However, despite residents' comorbidities, the role of family physicians (FPs) is not a regulated requirement within RHs. Previous studies have observed that RH residents have less primary care access and higher rates of emergency department visits and hospitalizations than long-term care residents.

Attachment (or rostering) is a formal mechanism to affiliate patients with FPs, although approaches and priorities to roster patients vary by jurisdiction and medical practice. Attachment is thought to improve access to FPs, promote timely care, and improve patients' health outcomes, although this has not been shown in AL settings. In Ontario, there is a current crisis of over 2.5 million unattached patients, and efforts are underway to achieve 100% attachment within the next 5 years. However, it is unclear whether AL residents are attached to FPs to a lesser or greater extent than the general population.

Objectives

1

Describe trends in the rostering of AL residents to FPs in Ontario, Canada, over the last decade.

2

Examine home-level factors associated with AL residents rostering and FP visits.

Methods

Design: Repeated cross-sectional study using administrative data from ICES (formally the Institute for Clinical Evaluative Sciences).

Population: All retirement home residents between 2013 and 2023, identified using a derived cohort of retirement homes across Ontario.

Outcomes: 1) Proportion of RH residents formally rostered, 2) Practice type of rostering physicians, & 3) Rate of primary care visits among RH residents with any FP.

Analyses: 1) Time-trend analyses of rostering patterns and forecasting using autoregressive integrated moving average models (ARIMA), & 2) Regression with generalized estimating equation modelling proportion rostered and rate of primary care visits.

Findings

Fig 1: Time trend of the proportion of residents rostered from 2013 to 2023 and forecasted to 2028.

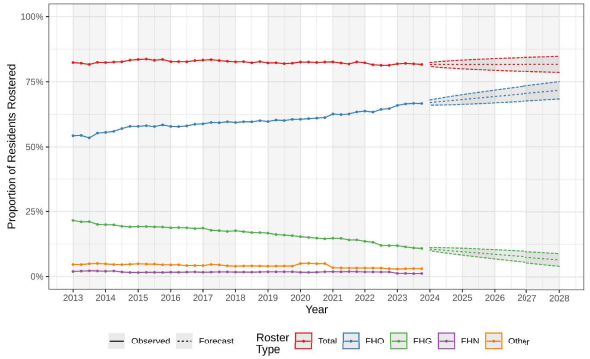

Fig 2: Forest plots depicting odds ratios of the association between the proportion of attached residents and exposures.

Outcome	Estimate (95% CI)	p-value
Time (years)	0.99 (0.98 - 1.00)	0.068
Home Characteristics		
Co-located with LTC	1.23 (0.89 - 1.71)	0.213
Home capacity ≥ 100 beds	1.03 (0.90 - 1.17)	0.708
Rural	0.99 (0.75 - 1.31)	0.938
Supportive Services Offered		
Administration of medications	0.88 (0.44 - 1.73)	0.707
Assistance with ambulation	0.94 (0.74 - 1.20)	0.631
Assistance with bathing	1.67 (1.10 - 2.55)	0.016
Assistance with feeding	0.98 (0.86 - 1.12)	0.774
Continence care	0.90 (0.75 - 1.08)	0.261
Dementia care	1.04 (0.86 - 1.26)	0.697
Medical services	0.80 (0.70 - 0.97)	0.014
Nursing services	0.91 (0.67 - 1.23)	0.538
Pharmacist services	1.15 (0.97 - 1.36)	0.115
Skin and wound care	1.10 (0.94 - 1.29)	0.227
Marginalization		
Age and Labourforce (quintiles)		
1 (least marginalized)		
2	0.63 (0.41 - 0.97)	0.037
3	0.72 (0.46 - 1.11)	0.136
4	0.90 (0.59 - 1.37)	0.629
5 (most marginalized)	0.86 (0.59 - 1.25)	0.424
Households and Dwellings (quintiles)		
1 (least marginalized)		
2	0.91 (0.58 - 1.43)	0.693
3	0.92 (0.59 - 1.41)	0.687
4	0.80 (0.53 - 1.22)	0.302
5 (most marginalized)	0.81 (0.54 - 1.23)	0.327
Material Resources (quintiles)		
1 (least marginalized)		
2	1.03 (0.77 - 1.38)	0.838
3	1.00 (0.78 - 1.29)	0.987
4	1.15 (0.89 - 1.48)	0.292
5 (most marginalized)	1.20 (0.92 - 1.57)	0.177
Racialized and Newcomer Populations (quintiles)		
1 (least marginalized)		
2	1.30 (1.06 - 1.59)	0.013
3	1.11 (0.89 - 1.39)	0.363
4	1.00 (0.79 - 1.26)	0.984
5 (most marginalized)	0.71 (0.54 - 0.92)	0.011

0.5 1 1.5

Fig 3: Forest plots depicting incidence rate ratios of the association between the number of primary care visits and exposures.

Outcome	Estimate (95% CI)	p-value
Proportion of residents attached (%)	0.92 (0.85 - 0.99)	0.037
Time (years)	1.01 (1.01 - 1.02)	< 0.001
Home Characteristics		
Co-located with LTC	0.95 (0.86 - 1.06)	0.370
Home capacity ≥ 100 beds	0.88 (0.83 - 0.93)	< 0.001
Rural	1.14 (1.01 - 1.29)	0.032
Supportive Services Offered		
Administration of medications	0.87 (0.74 - 1.02)	0.082
Assistance with ambulation	1.11 (0.98 - 1.25)	0.106
Assistance with bathing	0.94 (0.73 - 1.21)	0.609
Assistance with feeding	0.96 (0.91 - 1.01)	0.127
Continence care	1.01 (0.94 - 1.09)	0.701
Dementia care	0.98 (0.93 - 1.04)	0.576
Medical services	1.07 (1.01 - 1.12)	0.011
Nursing services	0.90 (0.75 - 1.09)	0.279
Pharmacist services	0.90 (0.84 - 0.96)	0.003
Skin and wound care	1.04 (0.98 - 1.10)	0.164
Marginalization		
Age and Labourforce (quintiles)		
1 (least marginalized)		
2	0.96 (0.84 - 1.10)	0.559
3	0.81 (0.68 - 0.95)	0.010
4	0.88 (0.78 - 1.00)	0.052
5 (most marginalized)	0.80 (0.70 - 0.92)	0.001
Households and Dwellings (quintiles)		
1 (least marginalized)		
2	1.01 (0.85 - 1.21)	0.901
3	0.95 (0.83 - 1.08)	0.409
4	1.05 (0.93 - 1.19)	0.447
5 (most marginalized)	1.00 (0.89 - 1.13)	0.966
Material Resources (quintiles)		
1 (least marginalized)		
2	0.84 (0.76 - 0.91)	< 0.001
3	1.03 (0.94 - 1.13)	0.480
4	0.94 (0.86 - 1.03)	0.170
5 (most marginalized)	0.92 (0.83 - 1.01)	0.085
Racialized and Newcomer Populations (quintiles)		
1 (least marginalized)		
2	0.95 (0.87 - 1.04)	0.293
3	1.00 (0.91 - 1.10)	0.994
4	0.94 (0.86 - 1.03)	0.179
5 (most marginalized)	0.93 (0.81 - 1.06)	0.267

0.5 1 1.5

Interpretation

The proportion of RH residents attached to an FP has remained relatively stable (~80%), despite ongoing challenges with primary care access in Canada, yet lower than community-dwelling older adults (~90%).

RHs that provided medical services were less likely to be attached, yet had a higher rate of visits with any FP, suggesting access to RH-affiliated physicians may substitute the need for formal attachment.

RH homes located in marginalized communities with a high concentration of visible minorities and newcomers had a lower proportion of residents rostered, reflecting concerns of equitable access to a responsible FP

Conversational Agent Interventions in Diabetes Care: A Systematic Review

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Introduction

- In 2021, approximately 529 million people had diabetes, projected to reach 10% of the world by 2050.
- Diabetes requires proper self-management to prevent complications. Self-management education (SME) can help, but benefits fade without ongoing support.
- Ongoing reinforcement from conversational agents (CAs) can improve clinical outcomes among patients.
- CAs are computer software systems that simulate human-like interactions.

Aims

- We sought to evaluate (i) the effectiveness of CAs in improving clinical outcomes such as glycemic control; (ii) the acceptability of CAs with respect to patients finding the technology useful; and, (iii) the safety of CAs with regard to the potential risks associated with using digital health technologies.

Methodology

- A systematic review was conducted to synthesize evidence on CA interventions for individuals with diabetes. Six databases were searched. Eligible studies evaluated health outcomes, acceptability, or safety of CAs. Data extraction and quality assessments were performed.

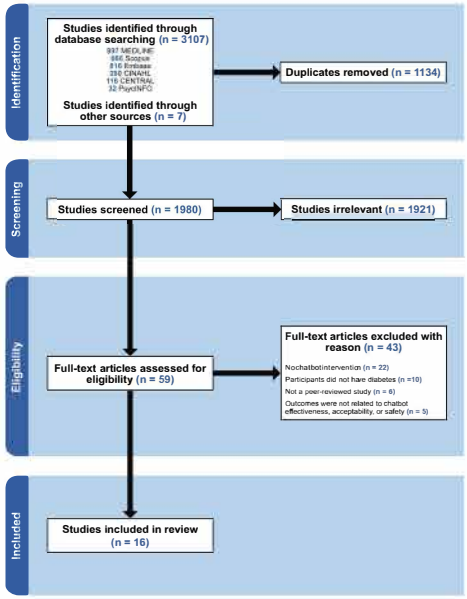

Figure 1. *PRISMA diagram of included studies*

Results

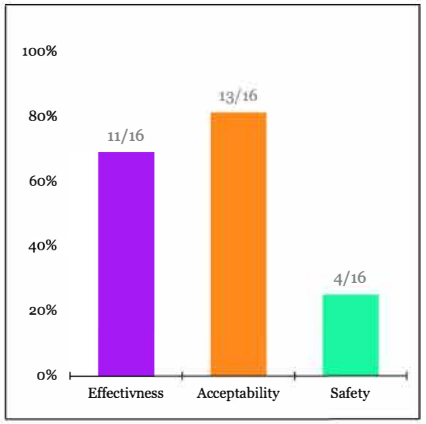

Figure 2. *Proportion of studies assessing each outcome*

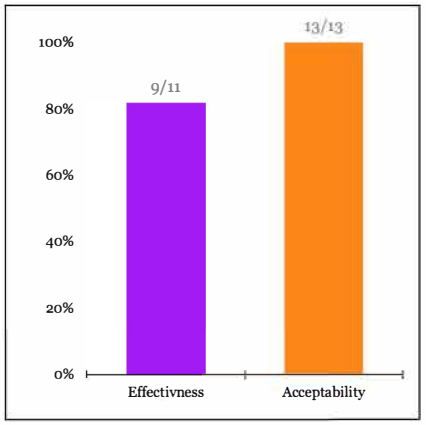

Figure 3. *Proportion of studies reporting positive outcomes among those that assessed each outcome*

Results

- Our findings indicate that CAs show promise, especially with regard to diabetes self-management.
- Eleven studies assessed effectiveness; most reported improvements in health outcomes. Thirteen studies evaluated acceptability, generally reporting positive results. Four studies addressed safety. In one study of older adults with T2D, nearly 40% of participants found the virtual assistant difficult to use.

Discussion

- CA technologies show promise for delivering SME and improving clinical outcomes, but evidence is limited by a lack of both safety reporting and long-term follow-up. Large-scale trials are needed to inform the role of CAs in diabetes care.

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Co-Designing Research Tools with Clinicians to Understand and Advance eConsult's Use in Dementia Care

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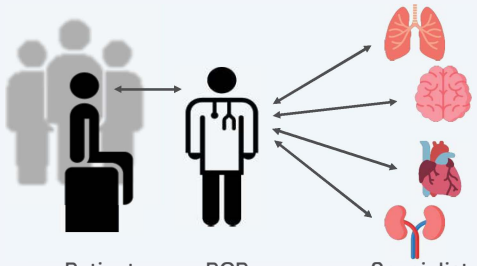
Background

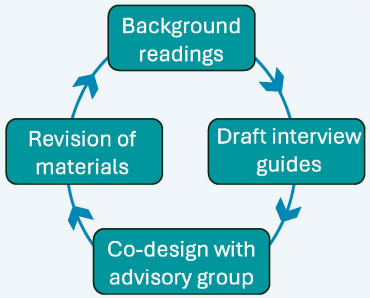
- **Persons with lived or living experience of dementia** (PWLLED) face complex health needs[1,2]
- **PCPs (primary care providers) experience a burden** in caring for PWLLED and can benefit from timely specialist advice[2]
- **eConsult** offers PCPs with rapid advice from specialists[3] for improved patient care



- **Co-design** of research tools with clinicians enables effective design, implementation, and dissemination of research[4]

OBJECTIVE: To explore **clinician perspectives** on the use of **eConsult** for providing **equitable care** to PWLLED

Approach



- Co-designing a **semi-structured interview guide** to use with PCPs and specialists
- Organizing, facilitating, and incorporating feedback from co-design meetings

Results

INTERVIEW GUIDE	CO-DESIGN FEEDBACK
Sociodemographic questions	*Inclusive terminology: "patients" → "persons"*
Accessing specialist advice	*Asking about needs for support*
Introduction to eConsult	*Ensure up-to-date clinical guidelines*
Perspectives on eConsult	*Importance of including goals of care*
Closing remarks	*Space for open-ended reflections*

PCP guide	Specialist guide
Integration of eConsult into clinical practice and understanding motivations for its use	Identifying appropriate questions and clinical scenarios or applications for eConsult

Conclusions

- Engaging clinicians in the co-design of study materials improved the **clinical relevance, clarity, and utility of the instruments**
- A new project emerged from the clinician discussions: services in Canada supporting **PCP-specialist communication in dementia care** – an environmental scan

NEXT STEPS

Follow-up co-design session

Interview 10-12 PCPs and specialists

Environmental scan

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Primary Care and Assertive Community Treatment (ACT) Teams

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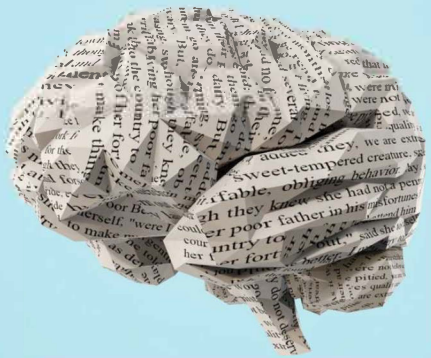

"I think it's become recognized that we [ACT] need to take care of [client physical health] ... We've had people who have died at a younger age than we would like, so, that has an impact on people. ... We have to really step this up."

Quote from individual interviews with a team lead (team 4) showcasing **viewing health holistically**

"I get concerned about people saying they want a nurse practitioner on the ACT team."

"I think if we had a GP [family physician] on every ACT team, that would be the ultimate dream"

Quotes from individual interviews with social workers on different ACT teams (teams 3, then team 4) illustrating **diverse opinions on integration**

Background

People with serious mental illness (SMI) face barriers to quality primary care. Assertive Community Treatment (ACT) teams provide intensive mental and social health services for people with SMI, but generally do not provide physical health services. This study aimed to understand **how ACT team members perceive primary care integration** (the addition of primary care clinicians to their teams or, the provision of primary care services as part of the ACT mandate), and **their experiences collaborating with external primary care clinicians in the community.**

Approach

27 ACT team members from five ACT teams in a single Ontario region participated in individual, semi-structured interviews lasting 45-60 minutes. Interviews were conducted between October 2021-February 2022 and audio-recorded and transcribed. Qualitative inductive thematic analysis was conducted on interview transcripts using a codebook approach.

Results

ACT team members **view health holistically** but see ACT as specifically responsible for mental health, while community primary care clinicians support physical health. However, clients often cannot access quality community primary care, so ACT teams sometimes provide basic physical care services (although **strategies vary** across interdisciplinary roles). Participants had **diverse opinions about whether primary care should be formally integrated** into ACT. ACT's primary care responsibilities increased during the pandemic, illustrating potential consequences and benefits.

"Each team handles the functioning a little bit differently ... In our team, we have a very large crossover ... we don't silo duties."

Quotes from individual interviews with a mental health worker (team 1) then social worker (team 4) illustrating **variety of teamwork strategies**

"For me and for team members, when there's something physical-related, we often will ask nurses to be part of that. I'm not comfortable"

Conclusions

Traditionally, ACT's scope has been contained to mental health. Since ACT clients face growing unmet primary care needs in Canada, primary care integration may be enticing. However, views diverge about the appropriateness of integration, so approaches need careful consideration and flexibility. Future research must explore preferences and capacities for primary care integration in ACT teams across regions, and the views of ACT clients and primary care clinicians.

Image credit: Microsoft 365

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Influence of Organizational Attributes on Registered Nurse Contributions to Well-Child Care: A Scoping Review

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Tucker H, RN, BScN, Ryan D, MA; Olsen-Lynch E, BSc MLIS

Background

- Well-child care is a critical component of preventive care for child health and well-being
- Well-child care generally consists of a series of structured health visits to monitor growth and development, conduct screenings, provide health education and deliver preventive care[1]
- Well-child care models vary internationally and can include the role of the Registered Nurse (RN)
- RNs are well-equipped to address the unique and multifaceted needs of children in primary care, affirming RNs as capable providers of well-child care[2]
- Current healthcare system challenges, including the workload of primary care providers, incentivize the need for RNs to engage in well-child care delivery[3 4]
- To date, no study has examined the scope of the literature regarding organizational attributes that influence RN contributions to well-child care

Aim & Research Question

- To identify the scope and characteristics of the literature related to organizational attributes that act as barriers to, or facilitators for, RN delivery of well-child care within the primary care context in high-income countries

What is the current state of the knowledge of the **organizational attributes** that influence **RN** contributions to **well-child care** within the context of **primary care** in high-income countries?

Guiding Framework

Nursing Care Organization Framework

Adapted from Dubois et al.[5]

Methods

- Joanna Briggs Institute (JBI) nine-stage scoping review methodology
- Based on a previously published a priori protocol[6]
- Updated search of three databases in June/July 2025
- 1536 titles/abstracts screened by two independent reviewers
- Full-text articles screened based on established criteria
- Data Extraction Tool to extract and organize findings after successful piloting of tool

Data Extraction Tool

Source Details
Study Citation
Country
Document Type
Design
Participants and Context (population; context)
Results
Delivery of well-child care (scope of practice) (concept)
Practice environment (concept)
Capacity for innovation (concept)
Staffing (concept)

Preliminary Results

- 13 articles included in the final review, published between 2010 and 2024, in English-language only
- Studies were conducted in Australia (n=6), Canada (n=2), Chile (n=1), Portugal (n=1), United States (n=2) and multiple high-income economies (n=1)

Organizational Attributes Described or Reported in Studies (N=13)

Scope of practice is the most commonly described organizational attribute influencing RN contributions to WCC (n=13) (reported or described in all studies)

Conclusions

- Review findings will inform future research priorities (e.g., nursing workforce) examining the influence of organizational attributes on primary care nursing contributions to well-child care

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