

A Qualitative Exploration of Proactive Falls Prevention by Canadian Primary Care Providers



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<https://doi.org/10.5770/cgj.25.582>

ABSTRACT

Background

Falls are a growing concern in Canada. Primary care providers are well positioned to address falls risk, but international literature suggests that best-practice guidelines are rarely followed. The objective of this study is to explore the perspectives of Canadian primary care providers around falls prevention and identify solutions.

Methods

We conducted one-on-one qualitative interviews with a maximum variation sample of nine primary care providers in Ontario (n=8) and Alberta (n=1) in Canada. Data were collected over telephone and in-person at the location of participants choosing. Audio recordings of the interviews were transcribed, then coded and analyzed with the Behaviour Change Wheel theoretical framework.

Results

Most participants reported relying on patient self-report, intuition, and reactive approaches to identifying falls risk. Reported barriers to falls prevention included low capability to gather information on patient history, context, and community resources; limited opportunity to manage patient complexity due to time constraints; and challenges with motivating patients to engage in care plans. Reported facilitators included team-based interprofessional care and provider motivation.

Conclusions

This study has found that Canadian primary care providers face barriers to identifying and managing falls risk. These barriers may be rooted in primary care culture, structure, and tradition.

Key words: qualitative research, accidental falls, primary health care, preventive health services, behaviour, motivation, Canada

INTRODUCTION

Falls are a growing concern in Canada and can lead to serious injury (e.g., hip fracture), illness (e.g., depression), institutionalization, and significant financial costs.⁽¹⁾ In 2010, it was estimated that falls among older adults cost Canada \$2 billion in direct costs every year,⁽²⁾ and from 2018-2019, there were over 200,000 unintentional fall emergency department visits in Canadians over the age of 65.⁽³⁾ According to the American Geriatrics Society/British Geriatrics Society (AGS/BGS) Clinical Practice Guideline for Prevention of Falls in Older Persons, primary care providers should screen patients over the age of 65 for falls and challenges in gait or balance annually.⁽⁴⁾ Strong evidence shows that the early identification of risk factors and multi-factorial intervention can prevent falls and/or the serious consequences of falls.⁽⁴⁾

However, screening and intervention for falls prevention may not be done consistently in primary care. One English survey found that only 29.7% of primary care providers routinely ask older adult patients about falls.⁽⁵⁾ Moreover, a German study determined that general practitioners were unaware of 83% of recent falls identified in a standardized geriatric assessment.⁽⁶⁾ Despite these results, interventions were only planned for 1 in 7 of their patients with recent falls.⁽⁶⁾ Research outside of Canada suggests that inconsistent falls prevention in primary care may result from insufficient training to manage clinical complexity, competing priorities, lack of time and resources, and patient refusal.⁽⁵⁻¹¹⁾

We know very little about primary care experiences with falls prevention practices (including screening, assessment, and management) in Canadian settings. Since Canada has a unique health sector, the purpose of this research was to explore falls prevention practices, barriers, and facilitators among Canadian primary care providers (primarily from Ontario), and offer context-specific strategies for improving primary care falls prevention with the Behaviour Change Wheel theoretical framework.⁽¹²⁾

METHODS

This exploratory qualitative study was conducted in Ontario, Canada as part of a large mixed-methods thesis project. We determined that semi-structured qualitative interviews were the most appropriate method for this study since they are useful in hypothesis generation and exploring complex topics.⁽¹³⁾

Theoretical Approach

This study was informed by the Behaviour Change Wheel theoretical framework, which aims to guide the development of behaviour change interventions.⁽¹²⁾ This framework is grounded in the COM-B model, which explains that to engage in a behaviour, individuals must have the capability (i.e., knowledge, skills), opportunity (i.e., resources, access, support), and motivation (i.e., intentions, beliefs, desires) to do so.⁽¹²⁾ With an understanding of these three components and related behaviour change approaches, researchers can better understand why behaviours (e.g., screening and assessment behaviours) exist within a specific context (e.g., primary care), and plan a clearer quality improvement strategy.⁽¹²⁾

Sampling and Recruitment

To recruit participants, we performed purposive sampling. This recruitment strategy, led by GH, a geriatrician, allowed us to obtain an adequate sample with a diversity of professional backgrounds⁽¹³⁾ despite anticipated resource constraints and recruitment challenges.⁽¹⁴⁾ A sample of nine self-identified primary care providers from Ontario (n=8) and Alberta (n=1) was interviewed. The sample had practiced for about 22 years on average as physicians (n=5), nurse practitioners (n=4), in a rural setting (n=1), on an interprofessional health team (n=5), and/or outside of an interprofessional team (n>1). There were no exclusion criteria.

Data Collection

The format (telephone or in-person) and location of interviews were chosen by participants to improve interviewee comfort and convenience. Before beginning, verbal and written informed consent was obtained, in which confidentiality and the right to withdraw from the study was assured. Interviews were conducted by AN with an interview guide. As a non-clinician and graduate student in public health, there was little concern that having AN as the interviewer would create an unfavourable power dynamic or cause social desirability bias. During interviews, participants were asked how they usually find out when a patient is at risk of falling. They were then invited to describe their approach to falls risk prevention, information collection, barriers, and facilitators. In the end, brief demographic information was collected (including professional background and number of years in practice), and participants provided their final thoughts. Audio-recordings of the interviews were collected then stored on a password-locked laptop. Memos describing location, insights, and interpretations were also taken following each interview to inform the analysis.⁽¹⁵⁾ The data was de-identified and

transcribed within two weeks of each interview, then linked to consent forms, memos, and project details in an audit trail.

Analysis

Using methods previously described by Nowell *et al.*,⁽¹⁶⁾ AN performed iterative thematic analysis of the data. To begin, transcripts were coded deductively on NVivo 12 software (QSR International (Americas) Inc., Burlington, MA) with a codebook of themes from the Capability, Opportunity, Motivation, Behaviour (COM-B) model.⁽¹²⁾ Segments of data that did not fit into this framework were coded openly. Next, using a constructivist approach, the codes were analyzed and refined into themes. Key tools in refining the themes included concept mapping with the Behaviour Change Wheel Theoretical Framework and discussions between AN, GH, LG, and MA. Finally, a one-page summary of the synthesized findings was sent to participants with an invitation to provide feedback. This study has received ethics clearance from the University of Waterloo Research Ethics Committee and complies with all relevant federal guidelines.

RESULTS

The interviews were on average 26 minutes long and the following themes were identified: 1) Variation in Falls Risk Identification, and 2) Limitations in Managing Falls Risk, with the subthemes 2a) Limitations in Knowledge for Assessment and Referral, 2b) Limitations in Time and Resources, and 2c) Limitations in Motivating Patients.

1. Variation in Falls Risk Identification

The sample reported using at least one of four strategies to uncovering falls risk: formal screening, patient or caregiver self-report, intuition, and other reports of falls. The four participants that reported using formal screening all practiced within a family health team. They used approaches such as asking a patient “if they had a fall within the last three months” (NP2), and applying a locally developed frailty case-finding program. Second, four participants described “depending on self-reporting or reporting from a spouse or a family member” (MD2) to uncover falls risk. An identified drawback of this strategy was that “a lot of time it’s not self-reported. We know that there’s a big stigma around that sometimes” (MD3). A third strategy was the ‘intuitive’ or ‘clinical judgment’ approach, often reported by experienced physicians in the sample: “You see them walking. So, obviously, you certainly notice... when they’re getting frail and not moving as well” (MD4). Fourth, an approach identified by five participants was reacting to falls, sometimes after a serious event: “People that fall most often present to [the emergency department] than primary care. So, as primary care providers you might hear about it after the fact that Mrs. X was in [the emergency department] with a fall” (MD1).

2. Limitations in Managing Falls Risk

Several barriers to managing falls risk among patients were identified by the participants. Supporting quotes for each of the following research themes are shown in Table 1.

TABLE 1.
Sub-themes for ‘Limitations in Managing Falls Risk’ with supporting quotes

	<i>Barrier</i>	<i>Facilitator</i>
Knowledge for Assessment and Referral	<p>Challenges in Gathering Information: “You’re working a little blind and both in the assessment piece and managing, understanding risk factors, but also in terms of execution of a care plan.” (MD2)</p>	<p>Team-based Approaches to Care: “I think if it’s more of a team thing, if you don’t feel so alone, you know, if you’re just in a solo- more of an individual practice and you feel like you have to manage it on your own ... That you don’t feel completely responsible.” (MD4)</p>
Time and Resources	<p>Limited Time: “You can’t see these people in five to 10 minutes. And usually I like to try and get the family involved... that makes it really hard because they’re busy, they’re working and then, you know, mum and dad don’t want to leave their home.” (NP3)</p>	<p>Team-based Approaches to Care: “I would probably refer [a patient] to the mobility clinic where they would have about a one hour appointment and they would see physiotherapy, occupational therapy, ... the physician, potentially a social worker... and then they could set up some kind of home program and follow-up.” (MD4)</p>
Motivating Patients	<p>Challenges with Patient Motivation: “If [the patient] is not concerned about falling then it’s gonna be difficult to make any headway.” (MD1)</p>	<p>Provider Motivation: “Falls are really important ... they’re a key indicator of how your patient is declining ... [and] it’s a thing we can do something about.” (NP1)</p>

2a. Limitations in Knowledge for Assessment and Referral

Eight of the participants reported limitations in their capability to gather information on patient history, patient context, and/or community resources as a barrier to managing falls. There was also a perception that up-to-date information around community resources was unavailable. One participant affirmed that the information is available, but many primary care providers are unaware of how to find it: “A lot of primary care providers don’t even know about [referral management platform]” (MD3). To overcome information gathering challenges, six participants emphasized that, “fall prevention [should be] a team approach” (MD2). However, challenges with team-based care were also identified: “[Shared care] means different things to different people... we all think we’re doing it, but we don’t do it very well” (MD2).

2b. Limitations in Time and Resources

The most often mentioned barrier to proactive falls prevention was the clinical complexity of falls, paired with a heavy workload, competing priorities, and lack of time: “There’s so many reasons that people fall. So, it’s not a quick thing to deal with” (MD1). To overcome this barrier, one physician with “the luxury of being [in] a family health team” explained that they refer patients to a mobility clinic where they can access interprofessional care. Many participants (n=4) had not experienced working in a well-resourced family health team and stated that they would need to schedule multiple visits with a patient to address falls risk: “I would definitely go through over one, two, maybe three appointments to work with them and bring recommendations forward” (NP1).

2c. Limitations in Motivating Patients

Finally, motivation was described as both a barrier and facilitator in falls prevention. Most participants expressed

being motivated to prevent falls among patients, but a few stated that their ability was highly dependent on patient motivation. Motivating patients to engage in home-based occupational therapy or physical therapy (NP2, NP3), discontinue of medications or other substances (MD1, NP3), accept assistive devices or home modifications (NP3), or attend an exercise program (NP2, NP3, MD3) was seen as challenging: “[Patients often] say, ‘well I’ve done physio it’s not helping me’ and they don’t do the exercises daily” (NP3).

DISCUSSION

To uncover falls risk, participants reported relying upon formal screening, patient self-report, intuition, and reports of falls. Participants also identified limitations to managing falls risk related to knowledge, resources, and motivational abilities. These limitations can be interpreted as opportunities for improvement when reflected upon with an understanding of the cultures, structures, and traditions that exist in primary care.

First, participants described limited capability in gathering information on patients and community resources. Patient information and information around referral is available, but some primary care providers may lack the skills and awareness to access it. Most primary care providers receive little training in managing patients with clinical complexity (i.e., geriatric training);⁽¹⁷⁾ therefore, they may be more comfortable using non-analytical ‘intuitive’ approaches to care, even in cases where analytical approaches are more appropriate.⁽¹⁸⁾ While non-analytical approaches are efficient, falls are complex and have risk factors that are difficult to notice or may be intentionally hidden in the clinical environment.^(6,19) In fact, patients often underreport falls due to forgetfulness, stigma, minimization, or avoidance of intensive care and institutionalization.⁽²⁰⁾ In analytical reasoning, collaboration

with allied health providers, systematic information gathering, and critical thinking are key.⁽¹⁹⁾ According to the Behaviour Change Wheel, training (e.g., on shared care, community resources) and system restructuring (e.g., decision support software, collaboration tools, value-based care models) may enhance analytical reasoning and facilitate proactive falls screening and prevention.^(12,18,19,21,22)

Additionally, participants reported limited time to engage in proactive falls prevention, given the complexity of falls as a problem, and of the potential interventions. It has been shown that primary care providers are, in fact, time-constrained.⁽²³⁾ The Behaviour Change Wheel framework posits that facilitating access to supportive resources may address this issue and increase opportunities for constructive behavior.⁽¹²⁾ In this study, all participants reporting formal falls risk screening were also part of a family health team. Interprofessional health teams are often more patient-centred, with higher quality chronic disease management, faster access to a greater range of services, and better coordination of internal services compared to other primary care models.⁽²⁴⁾ They have the opportunity to employ comprehensive team-based assessments that are unrealistic in more time-constrained primary care practices. According to the Behaviour Change Wheel, by restructuring primary care to lighten workloads (e.g., task-shifting), increasing access to supportive resources, and ensuring that clinically complex or disadvantaged populations can access comprehensive care (e.g., via interprofessional health teams), clinicians may have greater opportunities to address complex concerns, like falls.⁽¹²⁾

Finally, the participants felt motivated and able to assess falls and develop a care plan, but were challenged in motivating patients to engage. Of course, primary care providers are trained to assess and address falls; but biomedical approaches to care may lead to an overemphasis of physiological causes and solutions at the expense of environmental, mental, and emotional factors.⁽²⁵⁾ Conversely, relational approaches involving health promotion, education, and counselling can better motivate patients to manage their falls risk.⁽²⁶⁾ To illustrate, research demonstrates that positive attitudes towards discussing physical activity enhances related conversations around health promotion.⁽²⁷⁾ According to the Behaviour Change Wheel, training in health promotion, shifts towards value-based models of care, and data-driven quality assurance can be applied to enhance primary care provider motivation.^(12,22)

In terms of strengths, this study has a strong theoretical basis. This allowed us to gather rich data based on the real-world experiences of several primary care providers.⁽²⁸⁾ However, the participants of this study were primarily from Ontario and worked in interprofessional health teams. While falls prevention initiatives are happening across all of Canada,⁽¹⁾ these vary provincially and regionally. Additionally, providers in interprofessional teams or urban areas may have greater access to falls clinics, physiotherapists, and occupational therapists. Therefore, their understanding of falls and other topics is shaped by their provincial and practice

context and this study is not representative of all Canadian primary care providers. The purposive sampling approach may have mitigated volunteer bias.⁽¹⁶⁾ Nonetheless, to extend this research and generate greater insight on the state of falls prevention in Canada, it may be beneficial to explore the roles of other stakeholders (e.g., physiotherapists, occupational therapists, pharmacists) in falls prevention.

CONCLUSION

This study highlights that primary care providers face barriers to following recommended falls prevention guidelines. With the Behaviour Change Wheel, we determined that the views, actions, and limitations of primary care providers are influenced by overarching patterns in primary care culture, structure, and tradition. Performing further research and restructuring practice environments to enable analytic, integrated, and holistic approaches to falls prevention may benefit facilitators, mitigate barriers, and support health-care quality improvement.

ACKNOWLEDGEMENTS

Not applicable.

CONFLICT OF INTEREST DISCLOSURES

We have read and understood the *Canadian Geriatrics Journal's* policy on conflicts of interest disclosure and declare that we have none.

FUNDING

No grants, contracts, and/or awards from foundations, agencies, pharmaceutical companies or other private companies that funded this study. AN was awarded the Frederick Banting and Charles Best Canada Graduate Scholarship (CGS M) in September 2019 to support their graduate studies. GH received funding from the Schlegel-UW Research Institute for Aging for research activities unrelated to this project. LG and MA have no research funding to declare.

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