Family Physicians' Roles in Long-Term Care Homes and Other Congregate Residential Care Settings during the COVID-19 Pandemic: A Qualitative Study

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RESEARCH

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ABSTRACT

Context: The COVID-19 pandemic disproportionally affected long-term care (LTC) homes and other community-based congregate residential care settings. Although family physicians (FPs) play important roles in the care of residents in LTC homes, provincial pandemic plans make few references to their specific roles in LTC.

Objective: To examine the experiences of FPs providing care in LTC homes and other congregate care settings in Canada during the first year of the COVID-19 pandemic (2020–2021).

Methods: As part of a multiple case study, we conducted semi-structured qualitative interviews with FPs across four Canadian regions. Interviews were transcribed, and a thematic analysis approach was employed.

Findings: Twenty-one of the 68 FPs interviewed discussed providing care in congregate residential settings, including LTC. We identified three major themes: 1) the roles of FPs in community-based congregate residential care settings during a pandemic, 2) modification of the delivery of routine care, and 3) special workforce considerations in pandemic response for community-based congregate residential care settings.

Limitations: We interviewed FPs in four Canadian jurisdictions between October 2020 and June 2021; findings may not be generalisable to later pandemic stages or to other provinces. Our recruitment strategy did not specifically target FPs who worked in different types of congregate residential care facilities; further research is needed to examine these settings in greater depth.

Implications: FPs have a unique understanding of the populations they serve and are well suited to plan and implement community-adaptive procedures. Future pandemic plans should implement LTC-related FP roles during the pre-pandemic stage of a pandemic response.

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INTRODUCTION

Long-term care (LTC) homes and other community-based congregate residential care settings, such as retirement homes, adapted group homes, and hospices, were disproportionally affected by COVID-19 relative to other health care settings (Canadian Institute for Health Information [CIHI], 2020, 2021; Landes et al., 2020), especially during the early waves of the pandemic. These facilities provide living accommodations for individuals, typically older adults, who require up to 24-hour supervised care and support (Estabrooks et al., 2020). Residents of LTC homes experienced excess cases and mortality from COVID-19 compared to the general population (Béland and Marier, 2020; CIHI, 2020). By February 2021, residents of LTC homes represented 59% of the reported COVID-19-related deaths in Canada, greater than the 41% average reported by Organization for Economic Co-operation and Development countries, where country-specific rates ranged from a low of 4% in Greece to a high of 75% in Australia (Rocard, Sillitti, and Llena-Nozal, 2021).

Various factors contributed to high infection and mortality rates in community-based congregate residential care facilities. The application of social distancing protocols was challenging in these locations due to the presence of shared living spaces and close interactions with multiple staff members on a regular basis (Landes et al., 2020; Liu et al., 2020; Vilches et al., 2021). In addition, staff initially worked at multiple sites, without adequate personal protective equipment (PPE), and they had to work during continuing staff shortages (Levison et al., 2023; Vilches et al., 2021). Moreover, individuals residing in LTC homes are also more vulnerable to poor outcomes from infections, such as COVID-19, compared to the general population. LTC residents are mainly 80 years and older (Hsu et al., 2020) and roughly 87% of residents have cognitive impairments from dementia, stroke, or brain trauma (College of Family Physicians of Canada [CFPC] and Canadian Society for Long-Term Care Medicine [CSLTCM], 2021).

Family physicians (FPs) play important roles in the care of individuals living in community-based congregate residential care settings, including serving as attending physicians and medical directors for LTC homes (CFPC and CSLTCM, 2021; Rahim-Jamal and Mb, 2010). Finding enough FPs to provide care in LTC and other residential care facilities was a challenge prior to the COVID-19 pandemic (Marshall et al., 2013; Mathews, Ryan, and Power, 2017; Lam et al., 2012). FPs, who provide most primary care services, are largely independent small business owners or subcontractors and have autonomy over the services they choose to provide. In Ontario (Canada's most populous province), only 628 FPs (6.1% of FPs in the province) cared for the majority (90.4%) of LTC residents (Lam et al., 2012). Moreover, while LTC facilities are required to have medical director services, like the individual FP working in these facilities, their roles and responsibilities are not clearly described (Collins et al. 2022; Frank et al., 2006).

As was seen across many sectors, a general lack of pandemic preparedness affected the delivery and standards of care within LTC homes (CIHI, 2020) and other community-based congregate residential care settings. Despite the known risks of influenza, federal and provincial pandemic plans published prior to the COVID-19 pandemic make few references to these settings (Alberta Health, 2014; Government of Canada, 2018; Ontario Ministry of Health and Long-Term Care, 2013). Moreover, although a number of provincial plans refer to the need to continue the delivery of primary care, none refer to the specific roles of FPs in LTC or other congregate residential care settings or outline considerations for the delivery of care during a pandemic.

Using qualitative interviews, we examine the experiences of FPs providing care in LTC homes and other congregate residential care settings in Canada during the first year of the COVID-19 pandemic (2020–2021). The COVID-19 pandemic presents a unique opportunity to examine the roles of FPs in these settings to inform the development of future pandemic plans. This study addresses a gap in existing pandemic preparedness plans and is an integral step to ensuring that necessary resources and training are available to FPs.

METHODS

This study is part of a larger project examining FP roles during the COVID-19 pandemic and is based on a multiple case study of four regions in Canada (Mathews et al., 2021): the Vancouver Coastal Health region in British Columbia (BC), the Eastern Health region of Newfoundland and Labrador (NL), the province of Nova Scotia (NS), and the Ontario (ON) Health West Region. We chose these regions because they were the locations of our pre-existing research team, had variation in the numbers of COVID-19 cases and deaths, included urban and rural communities, had links to acute care, and represented varied regional structures and primary care funding and practice models. Each case study used mixed methods and included document reviews of policies and qualitative interviews.

Through a pragmatic approach, we used a semi-structured guide to interview FPs between October 2020 and June 2021. We recruited FPs using maximum variation sampling until we reached data saturation (Berg, 1995; Creswell, 2014), that is, until we had sufficient data to allow for rigorous analysis and interpretation of the data determined through team consultation. We sought variability by recruiting across a wide range of characteristics, including gender, primary care funding

and practice model, community size, involvement in team-based care, hospital affiliations, practice settings, and academic appointment.

To be included in the study, FPs had to be eligible to be clinically active in their region in 2020. We excluded postgraduate residents, FPs with temporary or restricted licences, and FPs who held exclusively academic, research, or administrative roles. Research assistants emailed study invitations to FPs on faculty and privileging lists, practice directories, and provincial Colleges of Physicians and Surgeons search portals. Additionally, we included recruitment notices in professional organisations' newsletters and social media posts and, where permitted, used snowball sampling.

Research assistants (LMe, LMo, RB, SS) and one investigator (MM) conducted interviews. In each interview, we asked participants to describe the different settings where they worked, including LTC. We then asked them to describe pandemic-related roles performed over different stages of the pandemic and at different work settings, the facilitators and barriers they experienced in performing these roles, potential roles that FPs could have filled, and demographic and practice characteristics. We adapted interview questions to account for differences in physician work settings, roles, and broader health system contexts in each region.

Based on participant preference, we conducted interviews by Zoom (Zoom Video Communications Inc.) or telephone. We audio-recorded interviews and transcribed them verbatim. We used an inductive thematic analysis approach and developed a coding template from the interview transcripts and interviewers' field notes (Berg, 1995; Creswell, 2014). In each region, at least two members of the research team (including those who conducted the interviews) independently read two or three transcripts to identify keywords and codes and organised them into a preliminary coding template which was then updated to incorporate any additional codes from subsequent transcripts. Teams from the four regions met to compare and refine codes and harmonise the templates with uniform code labels and descriptions. We resolved any coding disagreements through discussion and consensus.

We used the harmonised coding template and NVivo 12 (QSR International) to code transcripts and field notes. We read and reread the node reports from the codes related to providing care in residential care facilities, identifying and regrouping recurring concepts and describing the relationships between them to identify key themes (Berg, 1995; Creswell, 2014). We used frequencies, proportions, and means to summarise participant demographic and practice characteristics.

We took a number of steps to enhance study rigour: we pretested interview questions, used experienced interviewers, verified meaning with the participants during interviews, and kept a detailed audit trail (Berg, 1995; Creswell, 2014; Guest et al., 2012). We also included negative cases and used thick description and illustrative quotes.

POSITIONALITY

We used a pragmatic approach to conduct the research. We are an interdisciplinary team of primary care researchers with training in health administration, epidemiology, social work, anthropology, nursing, and family medicine. Co-authors include family physicians directly involved in pandemic response, including those providing care in residential facilities. Through the discussion of node reports and manuscript drafts, we reached a description and interpretation of findings that balanced our individual views and reflected the data.

RESULTS

Twenty-one of the 68 FPs interviewed for the larger project discussed providing care in congregate residential settings, including LTC: 6 from BC, 1 from NL, 3 from NS, and 11 from ON (Table 1). Interviews lasted between 17 and 97 minutes (mean 58 minutes). The participants included 12 women and 9 men and 8 FPs who practiced in rural communities. Participants had been in practice for an average of 17.4 years.

	TOTAL *n* = 21 *n* (%)
Province	
British Columbia	6 (28.6)
Ontario	11 (52.4)
Nova Scotia	3 (14.3)
Newfoundland and Labrador	1 (4.8)
Gender*	
Men	9 (42.9)
Women	12 (57.1)
Practice type	
Fee-for-service	2 (9.5)
Alternative payment plan**	19 (90.5)
Hospital affiliation	
No	2 (9.5)
Yes	19 (90.5)
Community size[α]	
Rural	8 (38.1)
Small urban	2 (9.5)

(Contd.)

	TOTAL *n* = 21 *n* (%)
Urban	10 (47.6)
Mix	1 (4.8)
Years in practice (mean; SD)	17.4 (9.4)

Table 1 Characteristics of participants who discussed care in community-based congregate residential care settings.

* Gender was asked as an open-ended question.

** Alternate payment includes all non-fee-for-service or enhanced fee-for-service payment types.

[α] Rural ≤ 10,000 population, small urban = 10,000–99,999 population, urban ≥ 100,0000.

SD = standard deviation.

Percentages may add up to more than 100 due to rounding.

Participants described working in a variety of community-based congregate residential care settings, including LTC and retirement homes, adapted group homes, and hospices. These settings provided care and housing for patients at high risk for adverse outcomes from COVID-19, including frail and older adults, and palliative patients as well as individuals with disabilities. We identified three overarching themes: 1) the roles of FPs in community-based congregate residential care settings during a pandemic (primarily LTC), 2) modification of the delivery of routine care, and 3) special workforce considerations in pandemic response for community-based congregate residential care settings.

ROLES OF FPS IN COMMUNITY-BASED RESIDENTIAL CARE SETTINGS DURING A PANDEMIC

Given the limited discussion of proactive FP roles in existing pandemic plans, responding to an outbreak was often described as one of the first activities that participants carried out in community-based residential care settings. Attending to a COVID-19 outbreak required coordination to ensure full-day FP availability to the facility, as well as coverage of the FPs' regular primary care practice. One FP described the tasks in organising FP coverage during a COVID-19 outbreak in a LTC home in his community as follows:

> At the point where they said, 'Okay, we think we need somebody clinical in,' it was me reaching out to [local network of FPs] and saying, '… I need people in this home. And then I need to create a call schedule, I need to create backup roles, I need your day work covered by somebody else, so we need to rally and have a meeting and plan all this out.' And, and that's what really my role was. [ON14]

As suggested in the quotation, participants were only involved in a pandemic response after an outbreak with little proactive articulation of the tasks and needed supports. Moreover, participants quickly realised that a coordinated effort by a group of FPs was needed to respond to an outbreak. Participants were cognizant of the potential risks of cross-contamination, especially if a FP worked in multiple facilities, and discussed strategies to reduce this risk:

> Most of us were just trying to … make sure that we didn't spread this between our care homes, recognising that most of us look after more than one site. Ideally you don't work in more than one home, so we spent a lot of discussion on how to limit the exposure when we were working in multi-site homes. [ON03]

The growing awareness of the risks of cross-contamination contrasted with the highly individualised way of working in LTC prior to the COVID-19 pandemic. FPs in this community coordinated with each other to limit the number who would enter each site.

Participants also described roles that leveraged their unique expertise and insight. In many instances, FPs relied on their holistic knowledge of patients and a patient-centred approach to develop policies and protocols. For example, participants contributed to visitor policies for hospice care and LTC:

> Patient's family members were not allowed in. … These older patients really needed their families and needed some support. … So, we had to start looking at policies of how we could allow family members to come in to support these people. [ON13]

They also relied on their expert medical knowledge to develop infection prevention and control protocols: '… being the expert and a medical policeman in terms of operationalising protocols to minimise COVID from entering the long-term care sectors. … And visitation would be restricted, movement within the institution itself would be minimised' [NL01]. FPs anticipated the risks of patients transitioning from hospitals to residential facilities and provided clinical and operational guidance as new facilities were arranged to accept non-acute patients from hospitals or to transfer uninfected patients from LTC in the event of a COVID-19 outbreak: 'I actually took on … giving some clinical consultation advice. … They're trying to set up a hotel … for [alternate level of care patients] so they can take them out of the hospital' [NS07] and 'We had two other areas within our region that were set up … but as alternative living arrangements, if

we had to decant people from congregate living settings' [ON10].

Participants also recognised their potential influence within the health care system and advocated for improved care in these settings. One FP recalled calling attention to staffing issues (such as staffing levels, sick leave, duty assignments, and access to PPE) following a COVID-19 outbreak at a nursing home: 'One of the nursing homes I work at did have an outbreak early on. … So, it was also an opportunity for advocacy for the nursing homes in regards to staffing' [ON01]. Another participant recalled reaching out to facilities to ensure that they had adequate access to needed resources:

> In terms of long-term care, because that's where most of the infections were early on, [we were] contacting long-term care facilities, making sure that they had someone in terms of physician support on-call all the time, so that they had access to someone to ask questions to. Also, ascertaining whether or not they had enough PPE. … Also, to help with arranging testing if that was an issue, helping with mobile testing, on-site testing. [ON10]

Participants recognised the importance of continuity of care and described activities to improve the quality of primary care. One participant described proactively reaching out to identify residents of a seniors' home who did not have a regular primary care provider and arranging providers for patients without a regular primary care provider, hereafter referred to as 'unattached patients': 'Some of those places had residents without FPs, so we contacted all of those homes, asked them, you know, "Do you have connections with primary care?" … If they didn't … arranging for those relationships to get started' [ON10]. Another participant described discussing goals of care with patients in the event they contracted COVID:

> Not only did I do lots of serious illness conversations with patients, primarily here at the nursing home, I helped inform some of the development of those and I taught those to others and [did] some of them for some of our other providers. [BC06]

Participants detailed the various roles and responsibilities of FPs in residential care facilities during the pandemic which built on their unique medical expertise, influential position in the community, and emphasis on patient-centredness and continuity of care.

MODIFYING THE DELIVERY OF ROUTINE CARE

Participants also continued to provide routine care to their patients in these facilities, but they grew increasingly aware of the risks of cross-contamination. Consequently, they modified the way they provided care to limit the potential of contracting or spreading COVID-19: 'Being a primary care provider in an office and seeing kids and sick people and fevers, we didn't know where it was coming from, so I was not comfortable in going in … to my retirement home' [ON07]. The case study sites varied in their policy approaches to addressing cross-contamination. In BC, FPs were advised to continue to visit patients in these settings wearing full PPE:

> There's been restrictions put on nurses that they can only work at one facility or long-term care. But they have not said that for physicians. … The response that we get is that the PPE is shown to work so if you use your PPE. But [the restrictions] specifically said 'this does not apply to physicians'. [BC08]

Nonetheless, participants described choosing to limit the number of sites where they worked: 'We had to switch rounds so that people weren't covering multiple sites, that they were just in one location' [BC02]. Participants also used virtual care to meet with nurses to direct their patient's care: 'I was basically doing care via the nurse. So, whoever the nurse who was on, I was speaking with and we were running through the issues. So, for a few months, I wasn't seeing my patients in person' [BC06].

In ON, despite a lack of official policy about the number of sites where FPs could work, participants adopted similar strategies to avoid physically entering facilities:

> I wasn't going in because I was working in other settings and I didn't want to bring COVID into the nursing homes, so I was doing virtual and phone rounds and just going in if I had to or meeting the nurse outside to exchange paperwork. [ON01]

Another participant recalled that FPs in the community worked together to limit direct contact with patients, even if they had to provide in-person care:

> We agreed that we would be in full PPE and we'd have a kit at the door that whenever a physician was going in, we would gown up. And we would try to limit actually seeing persons in-person unless it was absolutely necessary. We'd try to do virtual care and try to handle as much as we can [outside] the unit itself. So, trying not to go too close to the patient where they are, but to fill forms out and sign off things in a different area of the long-term care home. [ON03]

These quotations highlight the increasingly coordinated approaches (between groups of FPs and between FPs and nurses) to limit the spread of COVID-19.

Another participant added that FPs in the community limited the number of days of in-person care in these settings: 'We reduced the amount of visits we went to the nursing home for and instead of going two half-days I would just go the one day. … So, reduced, really, our time being there' [ON08]. Participants also ensured that FPs in their community who worked in high-risk settings did not also work in congregate residential facilities: 'We were very careful that the people who work [in the emergency department] don't go into the nursing homes, don't go into hospice. … There's just two physicians … [who] can go in and out [of the hospice]' [ON09]. Rather than individually deciding where and when they would work in residential care facilities, as was the case pre-pandemic, participants described how FPs collectively shared responsibilities for delivering care in the various settings where they worked to limit potential cross-contamination and promote patient safety.

SPECIAL WORKFORCE CONSIDERATIONS FOR COMMUNITY-BASED CONGREGATE RESIDENTIAL CARE SETTINGS

Participants highlighted additional workforce considerations for primary care providers who work in congregate care settings. Most FPs who work these settings also work in their own practices, where they may be exposed to patients who have COVID-19. Participants recognised the potential risk of carrying infections from one setting to the other:

> We have to eliminate that cross-contamination. And if you're eliminating a nurse going from the hospital and working at a retirement home, then I can't work in my practice and come into a [retirement home], because that is also a cross-contamination itself. [ON07]

However, given the limited number of FPs who work in congregate settings, especially in rural communities, restricting the number of settings where a FP worked presented unique challenges: 'In our community there aren't enough physicians doing long-term care, so most of us actually do more than one home. So, you can't change that' [ON03]. In addition to limiting exposure to residents of congregate care settings, FPs also had to limit exposure to patients in their practices, especially if they were needed to respond to a COVID-19 outbreak:

> One of the nursing homes I work at did have an outbreak early on. … I don't know that it impacted my primary care practice, but I think if there had been a serious outbreak at the home, where there were multiple residents that I had to care for, I would have had to drop my family practice to deal with that. [ON01]

Participants noted that high-level policy decisions around redeployment and staffing high-risk sites did not consider the practical realities of limiting cross-contamination risks at the community level. For example, in the event of a COVID-19 outbreak, FPs had to ensure coverage for their own practices. Additionally, FPs needed to consider arrangements for their staff, especially if the staff worked at high-risk sites, such as COVID-19 assessment centres:

> They were talking about staffing the assessment centre with the part-time RN. The people that [employ] those nurses part-time think that they only work part-time, … but what do you think they do the rest of the time? They work in other places. And you can't take a nurse who works in a nursing home and home care and your hospital [because] you're taking her out of all of those settings if you make her go work in an assessment centre. [ON01]

The potential risk of cross-contamination required FPs to coordinate across settings and providers to ensure coverage of the different sites where they could potentially work during the pandemic. The descriptions of their work in residential care facilities during the COVID-19 pandemic highlighted the concerted, coordinated, and collective approach participants adopted during the pandemic, which contrasted with the more independent and individual-oriented approach that was commonplace prior to the pandemic.

DISCUSSION

This study articulates the roles of FPs in residential care facilities during a pandemic. In addition to providing routine care to residents in congregate residential care settings, FPs contributed to the development and implementation of policies and protocols, coordinated the involvement of other FPs during a COVID-19 outbreak, advocated for needed resources, identified residents without primary care providers, and updated goals of care with residents. The potential risk of cross-contamination required changes to the delivery of routine care, including limiting the number of on-site visits, restricting the number of physicians entering a single facility, reducing the on-site role of FPs who worked in other high-risk settings, and utilising full PPE. Additionally, FPs used telephone or video visits with residents and coordinated through on-site nurses in an effort to limit direct contact with residents during in-person visits to the facility. These findings highlight important workforce considerations for providing primary care in congregate residential care settings during a pandemic: the small number of FPs providing care in these settings; the multiple work settings of FPs, especially in rural communities; and the need to

provide coverage for primary care practices of FPs who worked in congregate residential care settings during outbreaks. They also highlight the need for a coordinated plan for FPs working in residential care facilities.

Our findings address a gap in existing pandemic response plans on providing primary care in congregate residential care settings such as LTC homes, seniors' residences, adapted group homes, and hospices, as well as dedicated units for non-acute patients discharged from hospitals or uninfected residents from community-based facilities experiencing an outbreak. Additionally, facilities such as shelters, jails, and prisons each house a unique population with distinctive needs and risks that call for proactive pandemic plans tailored to these specific settings.

Our findings shed light on the important contributions of FPs in community-based congregate residential care settings. Previous studies have noted that there is no standard role description of medical directors in LTC homes in Canada, but that the role includes leadership and administration activities, quality improvement, managing medical staff, ensuring residents' rights, and participating in interdisciplinary committees (Collins et al., 2022). Ontario's Fixing LTC Act, introduced after the first waves of the pandemic in 2020, specified the responsibilities, duties, and qualifications of medical directors (Government of Ontario, 2022). Our findings illustrate how medical care director roles are operationalised during a pandemic. The study also highlights the need for FPs to act proactively; many of these activities (such as creating policies and protocols, assuring access to needed resources, arranging primary care providers for unattached patients, and clarifying goals of care) should be completed in the pre-pandemic stage (when public health officials begin to track cases of an influenza-like illness, before a pandemic is declared [Mathews et al., 2023]). Additionally, many of these activities should be incorporated into routine practices in preparation of annual influenza seasons.

The complexity of coordinating FP activity in community-based congregate residential care settings during a pandemic is compounded by the limited number of FPs who provide care in these settings, especially LTC in Canada (CIHI, 2013; Lam et al., 2012). While the number of older adults living in LTC facilities has grown over the past decades (Garner et al., 2018), the number of FPs providing care in these settings has decreased. A recent study found that 1,527 FPs were the most responsible physicians for 90% of all LTC residents in ON (Correia et al., 2022). FP involvement in LTC (during non-pandemic periods) is associated with higher-quality care (Correia et al., 2022; Marshall et al., 2013). Access to FPs can also reduce inappropriate transfers to acute care institutions in emergency situations (Marshall et al., 2013), a major source of potential infection during a pandemic (Razak et al., 2020; Wong et al., 2022). While FPs are often called upon to provide surge capacity to acute care settings, the need to provide coverage across multiple settings, limit risk of cross-contamination, and provide coverage to maintain clinic practices highlights the need to augment primary care capacity to safely address the multiple staffing requirements. Pandemic planning should incorporate the need to redeploy health care providers to primary care, especially during an outbreak.

Coordinating FP deployment in community-based congregate residential care settings requires leadership at the community and regional levels. Regional pandemic response structures need to include FPs in leadership positions (Mathews et al., 2022). These FPs provide an important conduit between different health system sectors and the FPs in the community, facilitate bidirectional communication (Young et al., 2023), and establish a sense of authority and accountability during rapidly unfolding crises such as outbreaks in these settings (Paquin et al., 2018; Snell et al., 2016). Community-level strategies for providing care in congregate residential care settings, limiting work in multiple settings, and covering clinic practices in the case of outbreaks or isolation requirements should also be established during the pre-pandemic stage. As community-based practitioners, FPs are aware of local factors and have a unique understanding of the populations they serve; therefore, they are well suited to plan and implement community-adaptive procedures for LTC and other congregate residential care facilities.

LIMITATIONS

We conducted interviews between October 2020 and June 2021. Our data may not capture the roles of FPs in later stages of the pandemic. Our recruitment strategy did not specifically target FPs who worked in different types of congregate residential care facilities. Further research is needed to examine specific care settings in greater depth. The majority of the data for this study comes from participants in ON and BC, which may reflect the greater number of COVID-19 cases and outbreaks in residential care facilities in these provinces during the period of data collection than in the other provinces (NS and NL) that comprised case study sites. We examined regions in four provinces in Canada, and our findings may not be transferable to other jurisdictions. Like all interviews, our data may be subject to recall bias (Althubaiti, 2016); however, we used consistent probes throughout the interviewing process to enhance participant recollections.

CONCLUSION

Using qualitative interviews, we examined the experiences of FPs providing care in congregate residential care settings, including LTC, in Canada. FPs play many

roles in these settings during pandemic response, such as developing and implementing policies and protocols, coordinating FP staffing during an outbreak, advocating for resources, arranging primary care providers for unattached patients, and updating patient goals of care. To minimise the risk of infecting congregate care setting residents as well as patients in other settings, FPs modified the delivery of routine care to limit direct interactions with residents of community-based congregate residential facilities. Pandemic planning for congregate residential care settings requires special attention to workforce considerations, including community-level coordination of FPs working in these settings and the need to provide coverage to other settings where individual FPs provide care (e.g., emergency departments, office practices), especially prior to the widespread availability of PPE or vaccines. The study findings also highlight the need to implement these proactive, preparatory FP roles during the pre-pandemic stage of a pandemic response.

ETHICS AND CONSENT

We obtained approval from the research ethics boards at Simon Fraser University and the University of British Columbia (through the harmonised research ethics platform provided by Research Ethics British Columbia), the Health Research Ethics Board of Newfoundland and Labrador, Nova Scotia Health, and Western University. Participants provided informed consent before interviews were scheduled. All methods in this study were performed in accordance with the relevant ethical guidelines and regulations.

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COMPETING INTERESTS

The authors have no competing interests to declare.

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