



<sup>1</sup> Faculty of Nursing, University of Alberta, Edmonton, Alberta, Canada

<sup>2</sup> Department of Family Medicine, University of Calgary, Alberta, Canada

<sup>3</sup> Department of Family Studies and Gerontology, Mount Saint Vincent University, Nova Scotia, Canada

<sup>4</sup> KT Program, Li Ka Shing Knowledge Institute, St Michael's Hospital-Unity Health Toronto, Toronto, Ontario Canada

Correspondence to: Sharon E Straus  
sharon.straus@unityhealth.to

Cite this as: *BMJ* 2023;382:e075148

<http://dx.doi.org/10.1136/bmj-2023-075148>

Published: 24 July 2023

## ACCOUNTABILITY FOR CANADA'S COVID-19 RESPONSE

### The predictable crisis of covid-19 in Canada's long term care homes

**Sharon Straus and colleagues** argue that residents, families, and staff in long term care homes in Canada were failed by governments during the pandemic and need coordinated efforts across federal, provincial, and territorial governments to safeguard these populations

Carole A Estabrooks,<sup>1</sup> Vivian Ewa,<sup>2</sup> Janice Keefe,<sup>3</sup> Sharon E Straus<sup>4</sup>

#### Key messages

- Canada's long term care homes (LTCHs)—including residents, their family and friend caregivers, and staff—experienced among the highest proportion of deaths among all covid-19 deaths worldwide
- This crisis was predicted in more than 100 reports and inquiries over the 50 years preceding the pandemic
- Three contributors to Canada's poor performance in LTCHs during the pandemic were inadequate attention to growing resident complexity; longstanding failure to support the LTCH workforce; and a lack of integration within health and social systems
- Fragmented LTCH, health, and public health systems led to variable responses across provinces and territories
- Unprecedented coordination and collaboration at federal and provincial or territorial levels are needed to create an integrated health system with funding and accountability

#### Lessons from the pandemic

People living and working in long term care homes (LTCHs) (box 1) in Canada—mostly older adults—were disproportionately affected by covid-19.<sup>1</sup> LTCH residents accounted for 3% of covid cases in Canada and 43% of related deaths by December 2021, among the highest proportion of LTCH covid-19 deaths worldwide.<sup>1,2</sup> LTCH residents were prioritised for the covid-19 vaccine rollout and by 15 March 2021 95% had received their first dose.<sup>1</sup> Outbreaks and deaths declined but continued; more LTCH outbreaks occurred in 2022 than in 2020 and 2021 combined as vaccination booster uptake varied.<sup>3</sup> In 2022 covid-19 was the leading cause of hospital admissions of older adults in Canada.<sup>4</sup> Compared with before the pandemic, LTCH residents received less medical care, experienced increased antipsychotic use, and had less visitor contact, resulting in social isolation.<sup>5,6</sup>

#### Box 1: Long term care homes in Canada

- Canada is a nation of 40 million people with 10 provinces and three territories
- The Canada Health Act<sup>7</sup> defines the health services that must be included by each provincial health insurance programme to qualify for federal funds, guaranteeing universality, comprehensiveness, portability, accessibility, and public administration
- The federal government provides Canada Health Transfer Funds to the provinces to deliver healthcare.

Education and regulation of healthcare professionals is also a provincial responsibility<sup>7</sup>

- LTC is not publicly insured under the Canada Health Act and is governed by provincial and territorial legislation. As such, jurisdictions differ in range of services and cost coverage
- Health Canada defines residential LTC as “living accommodation for people who require onsite delivery of 24 hour, 7 day a week supervised care including professional health services, personal care, and services including meals, laundry, and housekeeping”<sup>8</sup>
- There is no common definition of LTC across provinces and territories in Canada
- Health Canada says “there is little consistency across Canada in what facilities are called, the level or type of care offered and how it is measured, and how facilities are governed and who owns them”<sup>8</sup>
- Assisted living facilities, seniors' residences, and retirement homes are for residents who are more independent than those in LTCH and medical and personal care are limited<sup>1</sup>
- Home care (including personal support and healthcare) is available in each province and territory for people living in their own home, but access is variable and typically round-the-clock care is not available unless privately funded
- In 2019-20, governments spent C\$13.6bn on facilities based LTC with C\$13.2bn from the provinces<sup>9,10</sup>
- A federal Parliamentary Budget Office report estimated in 2021 it would cost C\$13.7bn to implement the range of changes suggested over the course of the pandemic to improve care, including increasing pay and benefits for workers and mandating a minimum of 4 hours of direct care for each resident each day<sup>9</sup>
- Residents of LTCHs are financially responsible for rent, laundry, and housekeeping, and charges to the resident vary by province or territory and whether the home is for profit or not for profit. This cost could be more than C\$100 a day (excluding private, for-profit homes) in some jurisdictions and may be adjusted based on resident means<sup>10</sup>
- LTCHs can be publicly or privately owned:
  - o All publicly owned LTCHs are not for profit
  - o Privately owned LTCHs are for profit or not for profit; most receive public funds for provision of services
- The regulated LTCH workforce typically includes registered nurses, licensed practical nurses, and other health disciplines (such as physiotherapists,

recreation therapists, occupational therapists, dietitians, and spiritual providers). Physicians providing care may include primary care physicians and geriatricians

- The unregulated LTCH workforce includes care aides—sometimes known as personal support workers or care assistants, among other terms
- Typically, residents receive fewer than 4 hours of direct care a day and the majority (more than 80%) of this is provided by care aides.<sup>11–13</sup> Care aides are unlicensed and unregulated, although Alberta is exploring regulation.

International comparisons of deaths from covid-19 among LTCH residents is challenging because of differences in testing capacity and policies, approaches to recording deaths, LTCH definitions, and open data sharing.<sup>14</sup> In a February 2021 report from 22 countries, 41% (325 000) of covid-19 deaths were among LTCH residents.<sup>14</sup> As of August 2021, around 46% (681) of covid-19 deaths in Australia<sup>15</sup> occurred among LTCH residents and 28% (29 611) in the UK.<sup>16</sup> While Australia and Scotland prioritised LTCHs for vaccination, England initially prioritised healthcare staff.<sup>17</sup> Lockdowns and visitor restrictions also varied.<sup>17</sup> By May 2022, Finland (65%) and Norway (57%) had the highest proportions of covid-19 deaths in LTCH among 25 Organisation for Economic Co-operation and Development (OECD) countries, alongside lowest overall covid-19 mortality.<sup>18</sup>

While various factors (appendix 1), including chronic underfunding, contributed to the LTCH pandemic crisis, reviews identified critical modifiable components of Canada's poor performance: inadequate attention to growing LTCH resident complexity, chronic failure to support LTCH staff, and a lack of LTCH integration within health and social care systems.<sup>19–20</sup> More than 100 reports completed over 50 years pre-pandemic identified that these factors needed urgent attention.<sup>19–20</sup> Indeed, pre-pandemic mortality in Canada's LTCHs was among the highest in the world, almost 50% over one year.<sup>21</sup>

## What caused the LTCH crisis in Canada during the pandemic?

### Resident complexity

Growing LTCH resident complexity challenged pandemic response. Over the past 10 years, LTCH residents' clinical complexity grew substantially while length of stay declined.<sup>22</sup> Compared with 2000, a higher proportion of residents admitted to LTCH in 2015 had greater multimorbidity and physical limitations.<sup>23</sup> Residents in 2021–22 (fig 1) were older, more functionally dependent, and had more complex health and social needs and advanced dementia.<sup>24</sup> Residents therefore enter LTCHs later in the trajectory of their chronic conditions and have shorter lengths of stay, creating highly compressed dependency, complexity, and acuity.<sup>22–23</sup> Covid-19 infection further increased resident acuity.

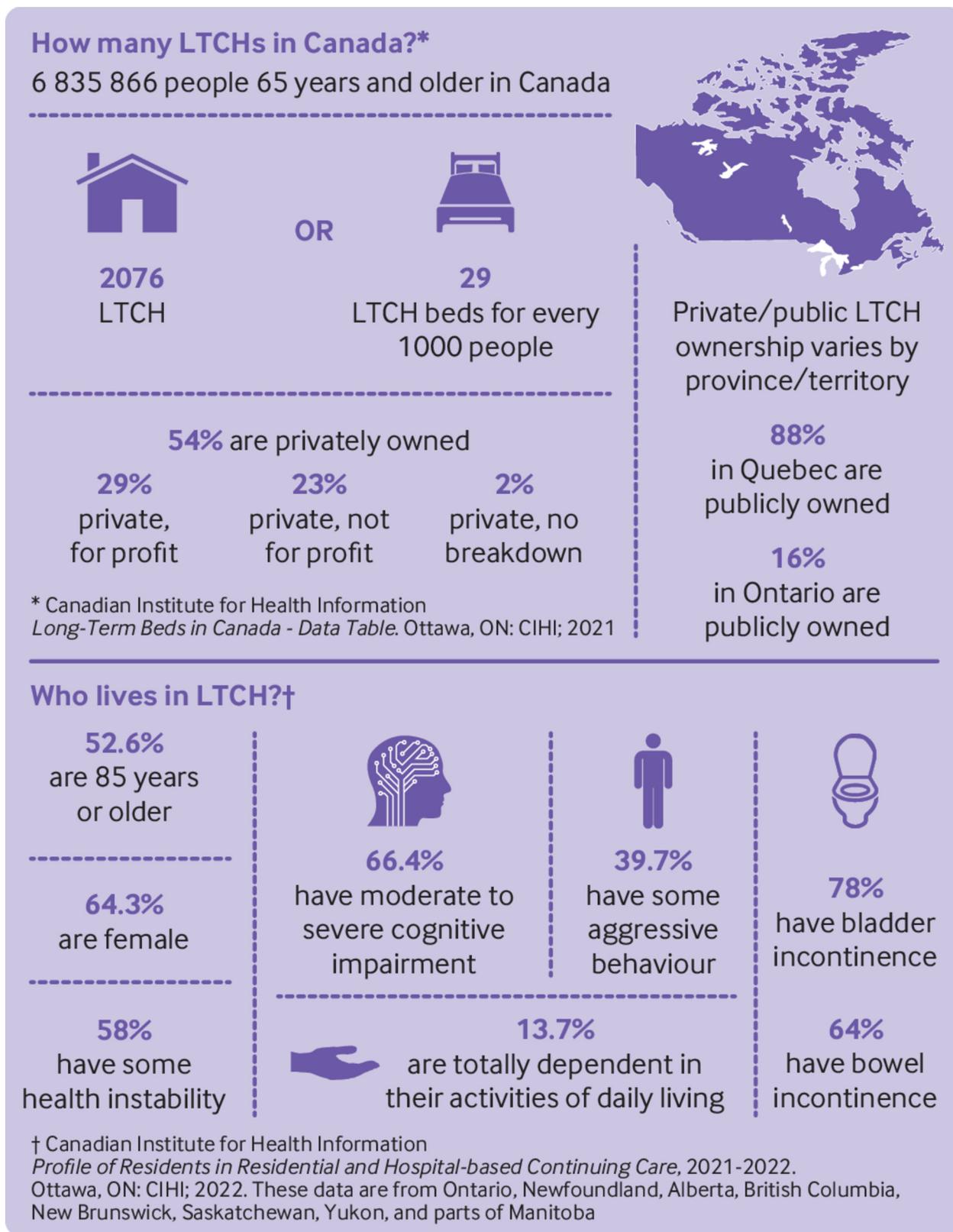


Fig 1 | Long term care homes (LTCH) in Canada

#### Workforce failures

For decades, Canada, alongside many other countries, has failed adequately to support, educate, or remunerate LTCH staff, creating

a situation unable to absorb the covid-19 crisis. Siloing of LTC means scant national data on its workforce including demographics, numbers working across several LTCHs, and training.<sup>21</sup> Provinces

report data differently—including paid care hours and worked care hours—or not at all.

The number of LTCH staff relative to the population aged 65 years and older is lower in Canada than the OECD average, although recent, comprehensive national data are unavailable.<sup>25</sup> The estimated number of LTCH staff in Canada dropped from 4.1 per 100 people aged 65 years and older in 2011 to 3.6 in 2016. Evidence indicates this ratio is inadequate to meet LTCH resident needs.<sup>26</sup> In 2022, researchers in Ontario estimated that almost 30 000 LTCH staff (registered nurses, registered practical nurses, care aides) will need to enter the market by 2035—increasing current staff by almost 50%<sup>27</sup>—with similar staffing needs in other provinces.<sup>11 28</sup> These numbers are underestimates as they do not consider the increase in direct care from 2.75 to 4 hours per resident a day, a goal in many jurisdictions.

LTCH staff are underpaid and undervalued. They earn around half of what of their acute care counterparts do.<sup>25</sup> Many of Canada's LTCH workforce are older racialised women (over-represented by 45% compared with the general population); more than 35% are foreign born, one of the highest proportions of any country.<sup>25 29 32</sup> Unregulated workers who provide 80-90% of direct LTCH care often work part time in multiple settings to make a living wage, frequently without benefits.<sup>29 30</sup> Compared with other healthcare workers, LTCH staff diagnosed with covid-19 were more likely to live in lower income areas, with a higher household density, and live with other essential services workers.<sup>33</sup> Throughout the pandemic, low waged essential workers were at highest risk of covid-19 and its consequences. This raises questions about how the intersection of ageism (towards residents), sexism (LTCH residents and staff more likely to be women), and racism impacted LTCHs and pandemic response.

LTCH staff were isolated and stressed by implementation of restrictive essential visitor policies, lack of personal protective equipment (PPE), lack of infection prevention and control (IPAC) training, fear of contacting or transmitting covid-19, and grief over resident and colleague deaths.<sup>34</sup> These factors contributed to burnout and moral distress, exacerbating infection risk and affecting staff retention.<sup>35</sup>

### Failure to integrate

LTC is not well integrated with community care (such as primary care), other continuing care settings (such as retirement homes), or acute care (hospitals). These sectors largely ignore the frequent, important transitions across settings, including outbreaks.<sup>36</sup> Many LTCHs did not have pandemic preparation plans (such as care plans for residents with covid, visitation policies, PPE access, IPAC support). In the first wave of the pandemic, acute care hospitals developed pandemic plans often without adequate consideration of impact on LTCHs such as PPE access.<sup>37</sup>

### What strategies were implemented and did they work?

Broadly, strategies to manage the pandemic in Canadian LTCHs were not pre-planned—they evolved through each wave and varied by jurisdiction.<sup>2</sup> In the initial waves, four primary mandates were implemented at varying times across provinces: declaring a state of emergency, restricting non-essential visitors, mandating masks, and expanding tests to LTCH staff and residents.<sup>2</sup> LTCHs in some provinces, such as British Columbia, initially fared better because of more rapid implementation of these protective mandates.<sup>2 38</sup> Outbreaks continued, however, as initial strategies failed to support LTCH staff,<sup>2</sup> such as with the provision of sickness benefits, for example. Later strategies included collaborations between acute

care hospitals and LTCHs to provide assessment and treatment in place; emphasis on infection prevention and control, including resident and staff vaccine prioritisation; expansion of staff models (including task shifting); incentives and single site employment; management of visitor access; and development of national standards. Notably, the lack of preparedness led to military deployment to LTCHs in Ontario (box 2) and Quebec during covid-19 outbreaks.<sup>37</sup>

#### Box 2: Observations by Canadian Armed Forces on deployment to Ontario LTCHs

In mid-April 2020, the Canadian Armed Forces were deployed to care for residents in seven LTCHs in Ontario (Canada's most populous province) that were experiencing uncontrolled covid-19 outbreaks. Military personnel were deployed within 12 days to these homes and provided an initial report<sup>37</sup> of their experiences to the federal government in May 2020. This report was shared with provincial leaders and media.

Based on two weeks of observation, substantial problems were raised including the reuse of PPE by staff while treating multiple residents (a result of limited PPE access; lack of staff awareness that gloves and gowns should be changed after caring for each resident; and a culture of fear because of PPE costs). The report cited inadequate processes for managing residents who were at risk of wandering and who had covid-19, thereby risking infection of other residents; lack of bed linen and wound care supplies; as well as pest infestations (cockroaches, ants) at several homes.

Staff overload and burnout were reported, as well as aggressive and inappropriate behaviour by staff towards residents. The report described substantial staff shortages. In one home, there was one registered nurse for 200 residents and in others, one personal support worker (care aide) for 30-40 residents. Lack of staffing contributed to residents failing to receive appropriate nutrition or personal care including bathing and toileting. Military personnel reported hearing residents crying out for help from 30 minutes to two hours, while awaiting staff response.

In their final report in 2021, the military reported that at one home, 26 residents likely died from dehydration prior to their arrival, as well as structural problems such as lack of adequate ventilation and cleaning.<sup>39</sup> Of note, the Canadian Red Cross deployed personnel to LTCHs in Ontario until January 2022.<sup>40</sup>

### Assessment, treatment, and stabilisation

After the first covid-19 wave, several provinces adopted an assessment, treatment, and stabilisation in place policy to avoid hospital admission hazards such as delirium and falls. While some raised concerns about potential overuse, this policy was consistent with Choosing Wisely Canada guidelines, which recommend against transferring residents to hospital unless their urgent care needs can not be met onsite.<sup>41</sup> Programmes included community paramedicine outreach for LTCH residents<sup>42 43</sup> and linking acute care hospital physicians with LTCH counterparts to support unwell residents<sup>44</sup> and avoid transfers.

### Managing infection prevention and control

LTCHs attempted different strategies to expand staffing resources; introduce IPAC training for staff; group purchase IPAC supplies such as masks; and enhance cleaning.<sup>45 46</sup> Most provinces limited LTCH admissions to reduce multi-occupancy rooms.<sup>38 45 46</sup> Once covid-19 vaccines were available, vaccination for residents and staff was prioritised over the general population and staff vaccine mandates implemented. Vaccines initially had a substantial impact, reducing infections and deaths among LTCH residents and staff by 90% between January and March 2021.<sup>1</sup> By the end of 2021, 84% of LTCHs responding to a national survey reported that 95% of residents were fully vaccinated (two doses) and almost 88% of LTCHs reported 95% staff vaccination coverage.<sup>45</sup> Similarly, second

vaccines and subsequent boosters were prioritised for LTCH residents and staff, although national data on LTCH booster uptake are not available. There are no national data on the effect of vaccine mandates on staff retention or illness. Vaccine mandates have largely been rescinded by provinces, leaving the burden of decision making responsibility to LTCHs.

### Expand staffing models and incentives

Some provinces created unregulated staffing positions or redeployed existing staff (task shifting) to support covid restriction implementation in LTCHs, such as visitor screening and cleaning.<sup>47</sup> To incentivise and retain staff, payments to LTCH staff were common, with many jurisdictions increasing wages temporarily.<sup>48-52</sup> Many provinces implemented sickness benefits and a single site policy with fulltime hours guaranteed.<sup>53-55</sup> The federal government implemented a financial benefit to support those who were ill with covid-19 or had to isolate. Notably, sickness benefits in all jurisdictions were not implemented until later pandemic waves, were often limited to a few days, and, recently, were rescinded in provinces including Ontario. Single site policies had the unintended consequence of reducing available staff across sites and care sectors, affecting care in LTCHs and leading to social isolation of community dwelling older adults.<sup>56</sup>

### Exclusion and inclusion of family or friend care givers

From pandemic onset, most provinces attempted to keep LTCH residents and staff safe by restricting visitors.<sup>57</sup> When community spread lessened in summer 2020, on-site visitation—initially outdoors and subsequently through a designated person—was implemented in some jurisdictions.<sup>57</sup> Initial restrictive measures were perceived to have devastating effects on residents by increasing loneliness, depressive symptoms, and behavioural problems, although no Canada-wide data are available.<sup>58</sup> These concerns led to questions about the residents' right to live at risk.<sup>59</sup>

### Provincial legislative changes

Multiple covid-19 pandemic reviews (appendix 2) were conducted across Canada with recommendations for legislation to improve LTC, but action is slow. For example, in November 2021 and May 2022 respectively, the Quebec ombudsperson<sup>60</sup> and coroner<sup>61</sup> released LTCH reviews on the impact of government covid-19 decisions such as transferring patients from acute care to LTCHs during initial pandemic waves, where more than 69% of covid related deaths subsequently occurred. Recommendations included staffing improvements and converting private LTCHs to publicly funded.<sup>61</sup> No implementation progress was reported to date. It is unclear if any of these reviews will have a substantive impact given no legislation has passed outside of Alberta and accountability processes are lacking.

### National LTCH standards

In response to the LTCH covid-19 crisis, in January 2023 the Health Standards Organisation released a national LTC service standard, including a guideline for a minimum of 4.1 hours of direct care per resident per day.<sup>62</sup> Given the voluntary nature of the standards, their impact is unclear.<sup>63</sup> The federal government stated it will not legislate their implementation as LTC is under provincial or territorial jurisdiction. This jurisdictional matter is unlikely to be resolvable without federal legislation accompanied by transfer of significant funds with accountabilities—improbable in the current context. The federal government has, however, begun early engagement to develop a new Safe LTC Act; it is unclear if this federal legislation will be aspirational or have significant authority.

## What's happening now in LTC?

Covid-19 has not disappeared from LTCHs, and it is unclear if lessons are being remembered. LTCHs continue to struggle with ongoing covid-19 infections among residents and staff, resident deaths from covid, and the workforce crisis.<sup>64 65</sup> In August 2022, Ontario passed legislation allowing patients awaiting LTCH admission to be moved from acute care hospitals to an LTCH without their consent in order to relieve pressures in acute care hospitals. The LTCH can be up to 70 km from their home, worsening isolation.<sup>66</sup> In August 2022, Quebec implemented a policy to allow four people per room in LTCHs, despite ongoing outbreaks.<sup>67</sup> Most provinces dropped the single work site policy. While various provincial pandemic LTCH reviews recommended increased staffing to 4 hours of daily direct care, no jurisdiction achieved this.

## Questions for a national inquiry

Worldwide, interested parties called for pandemic LTC inquiries.<sup>68 69</sup> This call was unheeded in Canada but there are multiple reports that identify questions and actions. Based on three modifiable contributors to the LTCH covid-19 crisis—inadequate attention to growing resident complexity, longstanding failure to support LTC staff, and a lack of LTC integration within the health and social systems—we outline recommendations to improve LTCH resident outcomes and questions for a national inquiry or royal commission.

The complexity of LTCH resident needs and LTCH demand will increase as chronic disease and frailty rates rise, lack of dementia prevention and treatment continues, legislators and health authorities inadequately tackle the social determinants of health, and the social isolation crisis grows.<sup>70</sup> While we can learn from countries such as Denmark and Norway that invest more in direct care for older adults to live independently in the community, LTCHs will remain necessary.<sup>71</sup> Moreover, increased community investment will increase LTCH residents' complexity, requiring enhanced LTCH staffing.<sup>71</sup>

Where Canada and others can make immediate progress is in stabilising the LTCH workforce and learning from countries such as Denmark, which provides substantial LTC staff training and remuneration yielding improved resident quality of life.<sup>72 73</sup> In a June 2020 national policy brief,<sup>19</sup> we outlined evidence based recommendations (appendix 3) to support LTCH staff. We recommended that the federal government commission and implement a data based assessment of national LTCH standards for staffing, which must be achieved by tying funding to them.<sup>19</sup>

Federal funding must be tied to data collection requirements and accountability including on resident and staff quality of life, which are currently non-existent. Provincial governments must use these data to implement evidence based mandatory accreditation, regulation, and inspection of LTCHs. LTCH residents, care givers, staff, and managers must be engaged in these processes. LTCHs urgently need to raise hours of direct care to 4.1 hours per resident per day, which is impossible with the current funding and workforce. Provincial governments must implement salary alignment with acute care counterparts; it is worrisome that pandemic benefits were rescinded. LTCH workforce burnout existed pre-pandemic and the pandemic significantly exacerbated it.<sup>73 74</sup> Tackling workforce wellbeing is necessary and can be done through co-designed employee assistance programmes, improved workplace communication and inclusivity, and integration of unregulated workers into decision making.

These recommendations are difficult to achieve without relevant data. For example, at pandemic onset, provinces did not know the

proportion of care aides working across different LTCHs. No national data exist on resident and staff intersecting demographics such as race, gender, and language. Without these data, we cannot support current staff or accurately model our health human workforce needs, resulting in scooping workers from other countries. We need to increase our training capacity and cannot continue reliance on other countries (typically low and middle income countries) for staff.

We pose several questions for a national inquiry, which include the extent to which LTCH residents, their families or essential care partners, and staff were involved in policy and pandemic response, and how it led to social isolation among older adults. It also needs to consider the contribution of inadequate data—including those on LTCH quality of care, resident and staff quality of life and social determinants of health, and staffing—to outbreaks and pandemic response. It should examine how failure to support LTCH staff with a living wage and sickness benefits contributed to pandemic morbidity and mortality and whether the workforce crisis was exacerbated by LTCH policy. Finally, it should explore if LTC is prepared for the next public health emergency.

Using the inquiry results and the model of the Canada Health Act, we need a universal public LTCH plan that is accessible and funded and where federal funds are attached to relevant evidence based outcomes, holding LTCHs and provincial governments accountable.<sup>19</sup> Achieving this requires major collaboration across federal and provincial and territorial jurisdictions. If we fail again, we fear we will experience another predictable LTC crisis, risking the lives of more older adults and those who care for them.

Contributors and sources: CAE is a nurse researcher with expertise in mixed methods research, with a focus in long term care. VE is a primary care and care of the elderly physician who works in the LTC sector and was involved with covid policy and care in Alberta. JK is a social scientist with expertise in resident, family, and care giver experience in LTC. SES is a geriatrician researcher with expertise in mixed methods research with a focus in older adults including those in LTCHs. Both SES and VA were involved with caring for older adults during covid, in acute care, community, and LTC settings. SES conceived the paper. All authors participated in drafting the manuscript as well as editing. SES and CE are guarantors of the article.

Acknowledgments: SES and CEA hold tier 1 Canada Research chairs. JK holds the Lena Isabel Jodrey chair in gerontology.

Provenance and peer review: Commissioned; externally peer reviewed.

We have read and understood BMJ policy on declaration of interests and declare the following: SES received funding from Health Canada and the Public Health Agency of Canada to conduct covid-19 research in long term care homes.

This article is part of a series commissioned by *The BMJ* ([www.bmj.com/canada-covid-series](http://www.bmj.com/canada-covid-series)). The lead editor was Jocelyn Clark.

We thank Fatia de Matas for help with the infographic.

- Canadian Institute for Health Information. Impact of covid-19 on Canada's health care systems: long-term care. [www.cihi.ca/en/covid-19-resources/impact-of-covid-19-on-canadas-health-care-systems/long-term-care#ref6](http://www.cihi.ca/en/covid-19-resources/impact-of-covid-19-on-canadas-health-care-systems/long-term-care#ref6).
- Just DT, Variath C. An analysis of the long-term care policy mandates implemented in Canada during the first wave of the covid-19 pandemic. *Healthc Q* 2021;24:-7. doi: 10.12927/hcq.2021.26469 pmid: 33864437
- Public Health Ontario. Ontario covid-19 data tool. [www.publichealthontario.ca/en/data-and-analysis/infectious-disease/covid-19-data-surveillance/covid-19-data-tool?tab=outbreaks](http://www.publichealthontario.ca/en/data-and-analysis/infectious-disease/covid-19-data-surveillance/covid-19-data-tool?tab=outbreaks).
- Canadian Institute for Health Information. Hospital stays in Canada. [www.cihi.ca/en/hospital-stays-in-canada](http://www.cihi.ca/en/hospital-stays-in-canada)
- Canadian Institute for Health Information. Potentially inappropriate use of antipsychotics in long term care. <https://yourhealthsystem.cihi.ca/hsp/inbrief?lang=en#/indicators/O08/potentially-inappropriate-use-of-antipsychotics-in-long-term-care;/mapC1;mapLevel2>.
- Betini R, Milicic S, Lawand C. The impact of the covid-19 pandemic in long term care in Canada. *Healthc Q* 2021;24:-5. doi: 10.12927/hcq.2021.26625 pmid: 34792442
- Government of Canada. Justice Laws: Canada Health Act. <https://laws-lois.justice.gc.ca/eng/acts/c-6/page-1.html>.
- Health Canada. Long term facilities based care. 2004. [www.canada.ca/en/health-canada/services/home-continuing-care/long-term-facilities-based-care.html](http://www.canada.ca/en/health-canada/services/home-continuing-care/long-term-facilities-based-care.html).

- Parliamentary Budget Office. Cost estimate for motion 77: improvements to long term care. 2021. <https://distribution-a617274656661637473-pbo-dpb.ca/46d6a48451ea460cb2beefb46620819308f298940c57227ea95ae03edd39f61d>.
- Hill Notes. Long term care homes in Canada: how are they funded and regulated? 2020. <https://hillnotes.ca/2020/10/22/long-term-care-homes-in-canada-how-are-they-funded-and-regulated/#:~:text=Health%20Canada%20defines%20residential%20LTC,of%20LTC%20across%20the%20country>.
- BC Care Providers Association. Filling the gap: determining appropriate staffing and care levels for quality in long-term care. 2019. <https://bccare.ca/wp-content/uploads/2019/03/Filling-the-Gap-March-2019.pdf>.
- Statistics Canada. Selected measures of nursing care in long term care facilities by ownership, British Columbia, 1996 to 2006. [www150.statcan.gc.ca/n1/pub/82-003-x/2010004/article/11390/tbl/tbl3-eng.htm](http://www150.statcan.gc.ca/n1/pub/82-003-x/2010004/article/11390/tbl/tbl3-eng.htm).
- BC Ministry of Health. Residential care staffing Review. 2017. [www.health.gov.bc.ca/library/publications/year/2017/residential-care-staffing-review.pdf](http://www.health.gov.bc.ca/library/publications/year/2017/residential-care-staffing-review.pdf).
- Comas-Herrera A, Zalakaín J, Lemmon E, et al. Mortality associated with covid-19 in care homes: international evidence. International Long-Term Care Policy Network. <https://ltc-covid.org/2020/04/12/mortality-associated-with-covid-19-outbreaks-in-care-homes-early-international-evidence>.
- Australian Government Department of Health. Coronavirus (covid-19) case numbers and statistics. [www.health.gov.au/health-alerts/covid-19/case-numbers-and-statistics#cases-in-aged-care-services](http://www.health.gov.au/health-alerts/covid-19/case-numbers-and-statistics#cases-in-aged-care-services).
- Office for National Statistics. Number of deaths in care homes notified to the Care Quality Commission, England. [www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/numberofdeathsincarehomesnotifiedtothecarequalitycommissionengland](http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/numberofdeathsincarehomesnotifiedtothecarequalitycommissionengland).
- Lauter S, Lorenz-Dant K, Comas-Herrera A, Perobelli E. International "living" report: Long-Term Care and covid-19 vaccination, prioritization and data. International Long-Term Care Policy Network, CPEC-LSE. 18 January 2021. <https://ltccovid.org/2021/01/26/new-international-living-report-long-term-care-and-covid-19-vaccination-prioritization-and-data>.
- OECD. Ready for the next crisis? Investing in health system resilience. 2023. [www.oecd-ilibrary.org/social-issues-migration-health/ready-for-the-next-crisis-investing-in-health-system-resilience\\_1e53c8f0-en](http://www.oecd-ilibrary.org/social-issues-migration-health/ready-for-the-next-crisis-investing-in-health-system-resilience_1e53c8f0-en).
- Estabrooks CA, Straus SE, Flood CM, et al. Restoring trust: covid-19 and the future of long-term care in Canada. *Facets* 2020;5:-91doi: 10.1139/facets-2020-0056 .
- Webster P. COVID-19 highlights Canada's care home crisis. *Lancet* 2021;397. doi: 10.1016/S0140-6736(21)00083-0 pmid: 33453769
- Grignon M, Hothi H. Life and death in long-term care. Institute for Research on Public Policy. 2023. <https://irpp.org/research-studies/life-and-death-in-long-term-care-are-we-learning-the-wrong-lessons-from-covid-19>.
- Hoben M, Chamberlain SA, Gruneir A, et al. Nursing home length of stay in 3 Canadian health regions: Temporal trends, jurisdictional differences, and associated factors. *J Am Med Dir Assoc* 2019;20:-8. doi: 10.1016/j.jamda.2019.01.144 pmid: 30879948
- Ng R, Lane N, Tanuseputro P, et al. Increasing complexity of new nursing home residents in Ontario, Canada: A serial cross-sectional study. *J Am Geriatr Soc* 2020;68:-300. doi: 10.1111/jgs.16394 pmid: 32119121
- Canadian Institute for Health Information. Profile of residents in residential and hospital-based continuing care, 2021-2022. 2022. [www.cihi.ca/en/continuing-care-metadata](http://www.cihi.ca/en/continuing-care-metadata).
- OECD. Who cares? attracting and retaining care workers for the elderly. 2020. [www.oecd.org/publications/who-cares-attracting-and-retaining-elderly-care-workers-92c0ef68-en.htm](http://www.oecd.org/publications/who-cares-attracting-and-retaining-elderly-care-workers-92c0ef68-en.htm).
- Harrington C, Dellefield ME, Halifax E, Fleming ML, Bakerjian D. Appropriate nurse staffing levels for U.S. nursing homes. *Health Serv Insights* 2020;13:1178632920934785. doi: 10.1177/1178632920934785 pmid: 32655278
- Dass AR, Deber R, Laporte A. Forecasting staffing needs for Ontario's long-term care sector. *Healthc Policy* 2022;17(SP):-106. doi: 10.12927/hcpol.2022.26852 pmid: 35848558
- Alberta Health Services. Improving quality of life for residents in facility-based continuing care: Alberta facility-based continuing care review recommendations: final report. <https://open.alberta.ca/publications/improving-quality-life-residents-facility-based-continuing-care-review-recommendations>.
- Estabrooks CA, Squires JE, Carleton HL, Cummings GG, Norton PG. Who is looking after Mom and Dad? Unregulated workers in Canadian long-term care homes. *Can J Aging* 2015;34:-59. doi: 10.1017/S0714980814000506 pmid: 25525838
- Chamberlain SA, Hoben M, Squires JE, Cummings GG, Norton P, Estabrooks CA. Who is (still) looking after mom and dad? Few improvements in care aides' quality-of-work life. *Can J Aging* 2019;38:-50. doi: 10.1017/S0714980818000338 pmid: 30298797
- Lightman N, Baay C. Will covid-19 finally force us to address the devaluation of long term care workers? Policy Options. March 2021. <https://policyoptions.ripp.org/magazines/march-2021/will-covid-19-finally-force-us-to-address-the-devaluation-of-long-term-care-workers>.
- Statistics Canada. The contribution of immigrants and population groups designated as visible minorities to nurse aide, orderly and patient service associate occupations. 2020. [www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00036-eng.htm](http://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00036-eng.htm).
- Ma H, Yiu KYC, Baral SD, et al. Covid-19 cases among congregate care facility staff by neighborhood of residence and social and structural determinants: observational study. *JMIR Public Health Surveill* 2022;8:e34927. doi: 10.2196/34927 pmid: 35867901

- 34 Boamah SA, Weldrick R, Havaei F, Irshad A, Hutchinson A. Experiences of healthcare workers in long-term care during covid-19: a scoping review. *J Appl Gerontol* 2023;42:-36. doi: 10.1177/07334648221146252 pmid: 36541274
- 35 Tittley HK, Young S, Savage A, Thorne T, Spiers J, Estabrooks CA. Cracks in the foundation: The experience of care aides in long-term care homes during the COVID-19 pandemic. *J Am Geriatr Soc* 2023;71:-205. doi: 10.1111/jgs.18024 pmid: 36082802
- 36 Tate K, McLane P, Reid C, et al. Assessing quality of older persons' emergency transitions between long-term and acute care settings: a proof-of-concept study. *BMJ Open Qual* 2022;11:e001639. doi: 10.1136/bmjopen-2021-001639 pmid: 35264332
- 37 OP Laser- JTFC Observations in Long-Term Care Facilities in Ontario Headquarters 4th Canadian Division Joint Task Force (Central). 2020. [www.macleans.ca/wp-content/uploads/2020/05/JTFC-Observations-in-LTCF-in-ON.pdf](http://www.macleans.ca/wp-content/uploads/2020/05/JTFC-Observations-in-LTCF-in-ON.pdf).
- 38 Liu M, Maxwell CJ, Armstrong P, et al. COVID-19 in long-term care homes in Ontario and British Columbia. *CMAJ* 2020;192:-6. doi: 10.1503/cmaj.201860 pmid: 32998943
- 39 Howlett K. Patients died from neglect, not covid-19, in Ontario LTC homes, military report finds: "All they needed was water and a wipe down." *The Globe and Mail*. 11 May 2021. [www.theglobeandmail.com/canada/article-canadian-military-report-documents-deplorable-conditions-at-two](http://www.theglobeandmail.com/canada/article-canadian-military-report-documents-deplorable-conditions-at-two).
- 40 Canadian Red Cross. Support for long-term care homes in Ontario extended to manage covid-19 outbreaks. 16 October 2023. [www.canada.ca/en/public-safety-canada/news/2021/10/support-for-long-term-care-homes-in-ontario-extended-to-manage-covid-19-outbreaks.html](http://www.canada.ca/en/public-safety-canada/news/2021/10/support-for-long-term-care-homes-in-ontario-extended-to-manage-covid-19-outbreaks.html).
- 41 Choosing Wisely Canada. Long-term care. <https://choosingwiselycanada.org/recommendation/long-term-care>.
- 42 Mobile Integrated EMS. Health Care. Community paramedicine. [www.albertahealthservices.ca/ems/Page16487.aspx](http://www.albertahealthservices.ca/ems/Page16487.aspx).
- 43 Alberta Health Services. Referral, access, advice, placement, information, and destination. [www.albertahealthservices.ca/info/Page13345.aspx](http://www.albertahealthservices.ca/info/Page13345.aspx)
- 44 Wong BM, Rotteau L, Feldman S, et al. A novel collaborative care program to augment nursing home care during and after the covid-19 Pandemic. *J Am Med Dir Assoc* 2022;23:-307.e3. doi: 10.1016/j.jamda.2021.11.018 pmid: 34922907
- 45 Statistics Canada. Impacts of covid-19 on Canadian nursing homes and seniors' homes in 2021. 2022. [www150.statcan.gc.ca/n1/pub/45-28-0001/2022001/article/00011-eng.htm#n5](http://www150.statcan.gc.ca/n1/pub/45-28-0001/2022001/article/00011-eng.htm#n5).
- 46 Ontario Ministry of Long-term Care. Guidance for long-term care homes. [www.ontario.ca/page/covid-19-guidance-document-long-term-care-homes-ontario](http://www.ontario.ca/page/covid-19-guidance-document-long-term-care-homes-ontario)
- 47 Chamberlain SA, Warner G, Andrew MK, et al. With covid comes complexity: Assessing the implementation of family visitation programs in long-term care. *Gerontologist* 2023;63:-500. doi: 10.1093/geront/gnac175 pmid: 36462193
- 48 [www.cssea.bc.ca/index.php?option=com\\_content&view=article&id=4154:pandemic-pay&catid=63&Itemid=357](http://www.cssea.bc.ca/index.php?option=com_content&view=article&id=4154:pandemic-pay&catid=63&Itemid=357)
- 49 Ontario. Archived: Covid-19: temporary pandemic pay. [www.ontario.ca/page/covid-19-temporary-pandemic-pay#:~:text=Pandemic%20pay%20on%20hourly%20wages,pay%20directly%20from%20their%20employer](http://www.ontario.ca/page/covid-19-temporary-pandemic-pay#:~:text=Pandemic%20pay%20on%20hourly%20wages,pay%20directly%20from%20their%20employer).
- 50 Gawley K. Private care home workers call exclusion from BC pandemic pay "extremely unfair." *City News*. 22 October 2020. <https://vancouver.citynews.ca/2020/10/22/private-care-home-workers-call-exclusion-from-b-c-pandemic-pay-extremely-unfair>.
- 51 Ross S. Health-care staff on PEI offered bonuses to keep working. *CBC News*. 17 October 2022. [www.cbc.ca/news/canada/prince-edward-island/pei-health-care-incentives-1.6619133](http://www.cbc.ca/news/canada/prince-edward-island/pei-health-care-incentives-1.6619133).
- 52 Alberta Health Services. Critical worker benefit. [www.alberta.ca/critical-worker-benefit.aspx#:~:text=Phase%202,Overview,and%20critical%20services%20they%20needed](http://www.alberta.ca/critical-worker-benefit.aspx#:~:text=Phase%202,Overview,and%20critical%20services%20they%20needed).
- 53 Ontario. Limiting work to a single long term care home. 2022. [www.ontario.ca/laws/regulation/200146](http://www.ontario.ca/laws/regulation/200146).
- 54 British Columbia. Deployment and redeployment of staff: amendment to the facility staff assignment order. [www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/covid-19/covid-19-pho-order-amendment-facility-staff-assignment.pdf](http://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/covid-19/covid-19-pho-order-amendment-facility-staff-assignment.pdf).
- 55 Ontario. Ontario covid-19 worker income protection benefit. [www.ontario.ca/page/covid-19-worker-income-protection-benefit](http://www.ontario.ca/page/covid-19-worker-income-protection-benefit)
- 56 Wister AV, Kadowaki L. Social isolation among older adults during the pandemic. Federal, Provincial, and Territorial Forum of Ministers Responsible for Seniors. 2021. [www.canada.ca/content/dam/canada/employment-social-development/corporate/seniors/forum/covid-19-social-isolation/covid-19-social-isolation-en.pdf](http://www.canada.ca/content/dam/canada/employment-social-development/corporate/seniors/forum/covid-19-social-isolation/covid-19-social-isolation-en.pdf).
- 57 Freeman N. An overview of the covid-19 long-term care visitor policies across Canada. British Columbia Law Institute. [www.bcli.org/an-overview-of-the-covid-19-long-term-care-visitor-policies-across-canada](http://www.bcli.org/an-overview-of-the-covid-19-long-term-care-visitor-policies-across-canada).
- 58 Van der Roest HG, Prins M, van der Velden C, et al. The impact of covid-19 measures on well-being of older long-term care facility residents in the Netherlands. *J Am Med Dir Assoc* 2020;21:-70. doi: 10.1016/j.jamda.2020.09.007 pmid: 33036911
- 59 Baumann A, Crea-Arsenio M. Rights versus risks: the impact of isolation on residents and families in long-term care. *Healthc Policy* 2022;17(Sp):-44. doi: 10.12927/hcpol.2022.26849 pmid: 35848561
- 60 Lowrie M. Quebec ombudswoman calls for review of long-term care model after covid-19 deaths. *Global News*. 23 November 2021. <https://globalnews.ca/news/8396410/quebec-ombudswoman-report-covid-19-deaths-long-term-care>.
- 61 Quebec Coroner's Office. [www.coroner.gouv.qc.ca](http://www.coroner.gouv.qc.ca).
- 62 National Long-Term Care Services Standard. Learn about the new national long-term care services standard. <https://longtermcarestandards.ca>.
- 63 Roman K. New voluntary standards released for long-term care homes devastated by the pandemic. *CBC News*. 31 January 2023. [www.cbc.ca/news/politics/long-term-care-canada-standards-pandemic-1.6730780](http://www.cbc.ca/news/politics/long-term-care-canada-standards-pandemic-1.6730780).
- 64 Québec. Data on covid-19 in Québec. [www.quebec.ca/en/health/health-issues/a-z/2019-coronavirus/situation-coronavirus-in-quebec#c53633](http://www.quebec.ca/en/health/health-issues/a-z/2019-coronavirus/situation-coronavirus-in-quebec#c53633).
- 65 Public Health Ontario. Ontario covid-19 data tool. [www.publichealthontario.ca/en/Data-and-Analysis/Infectious-Disease/covid-19-Data-Surveillance/covid-19-Data-Tool?tab=outbreaks](http://www.publichealthontario.ca/en/Data-and-Analysis/Infectious-Disease/covid-19-Data-Surveillance/covid-19-Data-Tool?tab=outbreaks).
- 66 Legislative Assembly of Ontario. Bill 7, More Beds, Better Care Act, 2022. 2022. [www.ola.org/en/legislative-business/bills/parliament-43/session-1/bill-7](http://www.ola.org/en/legislative-business/bills/parliament-43/session-1/bill-7).
- 67 Quebec allowing up to 4 residents per room in long-term care, despite ongoing pandemic. *CBC News*. 19 August 2022. [www.cbc.ca/news/canada/montreal/chsd-rooms-covid-1.6556010](http://www.cbc.ca/news/canada/montreal/chsd-rooms-covid-1.6556010).
- 68 Martin FC. Care homes after covid-19: the government needs a plan. *BMJ* 2020;369:. doi: 10.1136/bmj.m2101 pmid: 32461246
- 69 Butler SM. The challenging future of long-term care for older adults. *JAMA Health Forum* 2022;3:e222133. doi: 10.1001/jamahealthforum.2022.2133 pmid: 36219037
- 70 Government of Canada. A dementia strategy for Canada: together we achieve—2012 annual report. [www.canada.ca/en/public-health/services/publications/diseases-conditions/dementia-strategy-annual-report-parliament-2021.html](http://www.canada.ca/en/public-health/services/publications/diseases-conditions/dementia-strategy-annual-report-parliament-2021.html).
- 71 Byrd W, Comas-Herrera A, Curry N, et al. LTC covid international living report on covid-19 and long-term care. London School of Economics and Political Science. 2021. <http://eprints.lse.ac.uk/112781>.
- 72 WHO Regional Office for Europe. Denmark: country case study on the integrated delivery of long-term care. 2019. <https://apps.who.int/iris/handle/10665/352847>.
- 73 A dignified elderly care in Denmark. *Healthcare Denmark*. 2019. [www.healthcaredenmark.dk/media/plvbj4yz/elderly-care-v10919.pdf](http://www.healthcaredenmark.dk/media/plvbj4yz/elderly-care-v10919.pdf).
- 74 Gray KL, Birtles H, Reichelt K, James IA. The experiences of care home staff during the COVID-19 pandemic: A systematic review. *Aging Ment Health* 2022;26:-9. doi: 10.1080/13607863.2021.2013433 pmid: 34967232