

OPINION EDITORIAL

Mitigating the Impact of COVID-19 in Canadian Long-Term Care Homes: Recommendations for Improving Healthcare Service Delivery

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INTRODUCTION

Equity and fairness are two central pillars of Canada's publicly funded healthcare system [1]. According to Section 7 of the *Canadian Charter of Rights and Freedoms*, every Canadian is entitled the right to life, which entails the equitable allocation of healthcare resources and services based on individual need [2]. The Canadian Constitution outlines the organization of the healthcare system and places the majority of the responsibilities for healthcare service delivery on provincial and territorial governments. These services are funded by the public and form the basis for the Canadian Government's mandate to achieve universal healthcare coverage for all citizens [1].

According to the World Health Organization, service delivery is one of six interrelated building blocks that make up a health system. Service delivery is the building block that dictates responsibilities for providing effective, safe, and quality personal and non-personal health interventions to those in need when and where they are needed [3]. The service delivery block is facilitated by the leadership and governance structures that assist in developing policy frameworks, leadership, incentives, and system design to ensure the effective delivery of healthcare services [3].

The 2019 Coronavirus Disease (COVID-19) pandemic has exposed disparities that forced governments to re-examine their health systems, especially in vulnerable populations such as residents in long-term care (LTC) facilities. LTC homes provide 'round-the-clock care for older adults who traditionally have complex health conditions that require specialized care [4]. LTC homes deliver services including healthcare to sections of the population that require aid in performing their everyday tasks. In Canada, most residents in LTC homes are advanced in age and have more than one chronic comorbidity [5]. Although LTC homes fall under the purview of provincial and territorial healthcare systems, they exist in a gray area where they may operate as either public or private facilities. Out of the 2,076 LTC homes in Canada, 54% are privately owned and 29% of these privately owned LTC homes operate as private for-profit organizations [6].

Globally, LTC homes were "ground zero" for COVID-19 transmission at the onset of the pandemic; poor preparedness led to Canadians being disproportionately affected when compared to other countries belonging to the Organization for Economic Co-operation and Development (OECD) [7]. Between March 1st 2020, and February 15th 2021, more than 2,500 nursing homes across the country experienced a COVID-19 outbreak, resulting in the deaths of over 14,000 residents [4]. This represents more than two-thirds of Canada's overall COVID-19 deaths during the first wave.

Since then, reported deaths have remained significantly higher than the international average by 41% [4]. Based on these outcomes, this paper discusses shortcomings present in health care service delivery in LTC homes across Canada. Furthermore, this paper presents two viable solutions to improve service delivery in LTC homes during the COVID-19 pandemic and to help prepare for future disease outbreaks.

SERVICE DELIVERY IN LONG-TERM CARE HOMES

Early identification of disease through robust testing and screening ensures that infectious disease threats are caught early and their impact is considerably minimized to only 1-4 cases per facility [7,8]. When the first cases of COVID-19 were recorded in 2020, however, it was clear that Canada was ill-prepared to manage the uncontrollable spread in LTC facilities [8]. In Canada, 94% of deaths in LTC homes in the first wave came from the 194 large outbreaks, each with over 25 cases [8]. The percentage of deaths in Canadian LTC homes was double that of other high income countries in the global north [8].

The LTC home outbreaks took a toll on the entire healthcare system, overwhelming the LTC homes and community at large [4,9]. The delayed implementation of safety protocols resulted in larger and more severe outbreaks. Indeed, provinces that had a slower pandemic response had wider and more frequent outbreaks in LTC homes [8]. Inadequate infection-prevention practices also impacted care workers in LTC homes: various reports have documented the use of garbage bags in place of medical gowns and coffee filters placed underneath masks in the absence of protective N95 masks [10].

In a bid to protect one of Canada's most vulnerable populations, the government implemented five mandates in LTC facilities during the first wave [8]. The first mandate declared a state of emergency and was followed by the second mandate: restricting non-essential visitors from entering LTC facilities.

The third mandate required mask-wearing throughout the facilities. However, this was greatly challenged by supply shortages throughout the country [8]. The fourth mandate prohibited LTC staff from working in multiple locations to decrease viral spread, which consequently reduced staffing numbers and left workers with fewer hours. Finally, the fifth mandate expanded testing to LTC staff and residents in order to track the spread of COVID-19 and prevent outbreaks [8].

During the third wave of the COVID-19 pandemic, public health officials added an additional mandate: vaccinations. By March 31st 2021, 95% of residents in LTC homes had their first vaccine dose, resulting in a significant decrease in morbidity and mortality [11]. Ontario, the most populous province, had a COVID-19 mortality rate of 13.5 per 100,000 LTC residents in the first wave, which decreased to 0.4 per 100,000 residents in the third wave [11].

These mandates were an attempt to protect LTC residents; however, they were implemented reactively rather than proactively, which limited the magnitude of their success. Through the strategic implementation of mandates, Canada could ensure the safety of residents in LTC homes and could uphold their commitment to equitable care, prioritizing protection for those who are most vulnerable to disease, especially in the event of future pandemics.

PROPOSED SOLUTIONS

Transitioning to Non-Profit LTC Homes:

Leadership and governance structure influences the quality of service delivery of LTC homes. The lack of accountability and regulation enabled outbreaks to go uncontrolled throughout the country, particularly in for-profit LTC homes [9,12]. The disparity between for-profit and non-profit homes is mediated primarily by staff unionization, chain ownership, and availability of personal protective equipment [9]. For-profit homes often compromise their quality of service in pursuit of maximal profit by paying lower wages, reducing staffing levels, and hiring more part-time workers; this results in more frequent

outbreaks and higher mortality rates compared to non-profit LTC homes [9]. Transitioning away from a for-profit home model towards a system of predominantly non-profit LTC homes will improve current and future disease outbreaks.

A Comprehensive Stakeholder Analysis:

The fourth mandate was intended to reduce COVID-19 spread between homes by restricting staff to one LTC location; however, the number of staff available at each LTC home dropped, contributing to a sector-wide staffing shortage [13]. Through the implementation of a comprehensive stakeholder analysis, all perspectives are examined allowing the intricacies of a complex system to be more easily understood. A stakeholder analysis would have prevented the implementation of a mandate that did not adequately consider the consequences of its enforcement.

CONCLUSION

The COVID-19 pandemic unveiled significant shortcomings in the overall service delivery of Canada's healthcare system. These inadequacies disproportionately impacted vulnerable communities, such as residents in LTC homes, through poor management during the successive waves of COVID-19. By transitioning away from for-profit homes, and introducing a comprehensive stakeholder analysis prior to policy development, there will be significant improvements made to the health care service delivery in LTC homes. This will strengthen the resiliency of LTC homes across Canada and reduce mortality rates in future pandemics.

REFERENCES

1. Government of Canada. Canada's Health care System. [Internet]. Ottawa: Government of Canada; 2019 [updated 2019 Sept 17; cited 2021 Dec 16]. Available from: <https://www.canada.ca/en/health-canada/services/health-care-system/reports-publications/health-care-system/canada.html>
2. Government of Canada. Section 7 - Life liberty and security of the person. [Internet]. Ottawa: Government of Canada; 2021 [updated 2021 Sept 1; cited Jan 15]. Available from: <https://www.justice.gc.ca/eng/csj-sjc/rfc-dlc/ccrf-ccdl/check/art7.html>

3. World Health Organization. Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies [Internet]. Geneva: World Health Organization; 2010 [cited 2021 Dec 16]. viiip. Available from: <https://apps.who.int/iris/handle/10665/258734>
4. Canadian Institute for Health Information. The Impact of COVID-19 on Long-Term Care in Canada. [Internet]. Ottawa: Canadian Institute for Health Information; 2021 [cited 2021 Dec 15]. 34p. Available from: <https://www.cihi.ca/sites/default/files/document/impact-covid-19-long-term-care-canada-first-6-months-report-en.pdf>
5. Webster P. COVID-19 highlights Canada's care home crisis. *Lancet*. 2021 Jan 16;397(10270):183.
6. Canada Institute for Health Information. Long-term care homes in Canada: How many and who owns them? [Internet]. Ottawa: Canadian Institute for Health Information; 2021 [updated 2021 June 10; cited Jan 15]. Available form: <https://www.cihi.ca/en/long-term-care-homes-in-canada-how-many-and-who-owns-them>
7. Barker RO, Astle A, Spilsbury K, Hanratty B. COVID-19 testing during care home outbreaks: the more the better? *Age Ageing*. 2021 May 12;50(5):1433-35.
8. 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 Apr 16;24(1):22-7.
9. Liu M, Maxwell CJ, Armstrong P, Schwandt M, Moser A, McGregor MJ, et al. COVID-19 in long-term care homes in Ontario and British Columbia. *Can Med Assoc J*. 2020 Nov 23;192(47):E1540-6.
10. Cox RH, Dickson D, Marier P. Resistance, Innovation, and Improvisation: Comparing the Responses of Nursing Home Workers to the COVID-19 Pandemic in Canada and the United States. *J. Comp. Policy Anal.: Res*. 2021 Jan 2;23(1):41-50.
11. Canada Institute for Health Information. Covid-19's impact on long-term care [Internet]. Ottawa: Canadian Institute for Health Information; 2021 [updated 2021 Dec 9; cited Jan 15]. Available form: <https://www.cihi.ca/en/covid-19-resources/impact-of-covid-19-on-canadas-health-care-systems/long-term-care>
12. Armstrong P, Armstrong H, Bourgeault I. Privatization and COVID-19: a deadly combination for nursing homes. *Vulnerable: The Law, Policy and Ethics of COVID-19*; University of Ottawa Press: Ontario, ON, Canada. 2020:451-2
13. Yau B, Vijh R, Prairie J, McKee G, Schwandt M. Lived experiences of frontline workers and leaders during COVID-19 outbreaks in long-term care: A qualitative study. *Am J Infect Control*. 2021 Aug;49(8):978-84.