### **OPINION EDITORIAL**

## An Evaluation of Ontario's Response to COVID-19 in Long-Term Care Facilities and Recommendations to Improve Health Policies

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#### INTRODUCTION

The global pandemic caused by the novel coronavirus, SARS-CoV-2, and its associated disease, COVID-19, has crippled the public health systems and economies of countries around the world [1]. COVID-19 is a potentially life-threatening disease that primarily affects the respiratory tract, with the most common symptoms including dry cough, fever, fatigue, and difficulty breathing [2]. Given the recentness of the outbreak, a comprehensive epidemiological overview of the performance of implemented health policies aimed at curbing the spread of COVID-19 throughout affected countries cannot be provided. However, considering the significant cumulative case and death totals globally, it can be reasoned that current interventions have largely failed to contain the spread of COVID-19 [3]. This, in part, has to do with the higher transmission rate of COVID-19 relative to similar diseases such as SARS [3] and a delayed response by many countries to reduce the spread in their general populations, be it due to a lack of resources and/or a sense of complacency.

In Canada, it is hypothesized that the country's passive approach, compared to other nations, resulted in poorer outcomes for its health care system including higher case totals and COVID-19 related deaths, as well as lower testing rates [1]. The purpose of this paper is to assess Ontario's response to controlling the spread of COVID-19 in long-term facilities, identifying factors that may have and may continue to contribute to further outbreaks, and

providing recommendations for mitigating these underlying factors. Primary care operations will be discussed briefly to emphasize the disparity in the preparedness and response to the pandemic as well as provide a basis for potential recommendations.

#### PRIMARY CARE OPERATIONS

A retrospective population-based analysis by Glazier et al. (2021) assessing the changes in total visit volume and visit type in primary care of all residents in Ontario identified a 28% decrease in total primary care visits over the first four months (March to July 2020) of the COVID-19 pandemic [4]. Primary care plays an integral role in providing more accessible care to treat symptoms of COVID-19, serving as a credible source for the latest public health directives, and reporting new and probable COVID cases in a timely manner [5]. By acting as intermediaries between their patients and public health administrators, they represent key sources for communicating vital data regarding underlying trends in community transmission.

# LONG-TERM CARE OPERATIONS AND RECOMMENDATIONS

On the other hand, long-term care (LTC) institutions have had the complete opposite fate regarding pandemic preparedness and response. Statistics from the Ontario Ministry of Health and Long-Term Care reported that, as of June 1, 2020, the 1652 deaths in LTC residents accounted for approximately 72% of the deaths in the province [7].

Previous studies list underlying co-morbidities and persistent systemic issues resulting from underfunding as some of the factors increasing the risk of morbidity and mortality during disease outbreaks in LTC homes [8, 9, 10]. The epidemiology of COVID-19 seems to indicate that individuals over the age of 65 and/or with certain co-morbidities have been linked with higher rates of hospitalizations, ICU admissions, and death [11]. In addition, systemic failings in longterm care, understaffing, and underfunding have contributed to poorer health outcomes for residents, most notably from neglect [12]. While the mainstay to ameliorating the state of LTC institutions throughout Canada is comprehensive funding, another factor, particularly inconsistent communication between LTC operators and their facilities, has proven to be a significant contributor to the state of long-term as it currently stands.

A study by Siu et al. (2020), conducting a threemonth cross-sectional survey of clinicians from Ontario Long-Term Care Clinicians (OLTCC) and Nurse-Led Outreach Teams (NLOTs), cited the disparity in the communication of public health guidelines between LTC operators (i.e., private corporations that own and run a chain of LTC homes) and local public health authorities as a contributing factor to each LTC home's response [12]. Out of all the examined variables in the study, medical director status was found to result in statistically different responses according to respondents [12]. Medical directors deliver regular public health recommendations between the LTC home leadership and frontline staff [12]. Inconsistent communication between LTC operators and frontline staff (i.e., clinicians, support workers) hinders the delivery of vital public health recommendations to frontline staff, thereby negatively impacting the implementation of measures to protect the lives of their residents [12].

Stall et al. (2020) reported an intriguing intervention by a nursing home in Toronto that partnered with a nearby hospital to control a new outbreak that resulted in 12 deaths, 89 infected residents, and 49 infected staff members [13]. The hospital created a designated four-phase plan that stabilized the outbreak over 10 days. This plan included (1)

engagement, relationship, and trust-building; (2) environmental scan, team building, and immediate response; (3) early-phase response; and (4) stabilization and transition period. [13]. The feasibility of this strategy is contingent on the availability of hospital staff, the majority of which is normally dedicated to in-hospital patients, to coordinate a response plan with the associated LTC facilities. This strategy can be effective if primary care physicians in LTC facilities take a more active role in the reporting of new and probable COVID-19 cases. As a patient's first point of contact, primary care physicians are responsible for identifying and reporting communicable diseases of importance to public health authorities [5]. In addition, with the majority of COVID-19 patients experiencing mild to moderate symptoms [5], increasing the concentration of community-based primary care facilities to triage, diagnose, and treat the disease will reduce the burden on hospitals, thereby allowing their staff to participate in developing strategies for LTC facilities to a greater capacity.

Another recommendation that can be implemented to enhance the response of LTC operators to the pandemic is to improve communication by inviting and engaging LTC staff and physicians early in the process of any future planning for coordinated community response [14]. This entails working directly alongside the province's science advisory table to assess modeling for future caseloads and designing measures to effectively isolate vulnerable residents and control the rate of infection.

### CONCLUSION

For the foreseeable future, the COVID-19 pandemic will continue to pose a significant threat to public health in Ontario, particularly with the rise of more transmissible variants of the SARS-CoV-2 virus [15, 16]. At the time of writing, the Health Canada approvals of the BioNTech-Pfizer and Moderna COVID-19 vaccines [17] provided a monumental step in the right direction for offering widespread and longer protection of vulnerable populations from severe disease. An ethical framework for the distribution of COVID-19 vaccines should be based

on reducing mortality rates to the greatest extent with a limited supply. The populations with the highest risk of mortality based on current epidemiological data, which includes residents of long-term care facilities, would ideally be placed on the shortlist for vaccines [12]. Ultimately, the province moved forward with an epidemiologic approach to vaccination by prioritizing those at the highest risk of contracting the virus.

Ontario's poor management of long-term care homes during the first wave of the COVID-19 pandemic was a result of several factors. To begin, the underfunding of staff and facilities led to a severe shortage of PPE and other medical resources necessary for the safety of both staff and residents. Inconsistent communication between LTC operators and their facilities induced a delay in the timely implementation of measures to reduce the spread of infection among residents and staff. Establishing a clear chain of communication between public health authorities, LTC operators, and frontline staff can ensure rapid responses to new information regarding the status of the pandemic. Furthermore, integrating the advice of healthcare professionals in contingency plans has been documented to reduce morbidity and mortality rates in LTC homes.

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