

# **Exploring the Multifaceted Impact of the COVID-19 Pandemic** on Long-Term Care Home Infection Control

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## **1–Introduction**

Long-term care homes (LTCHs) and similar facilities house approximately **78,000 Ontarians** to date, and while able to provide supportive care, are also prone to disease outbreaks<sup>1</sup>.

The onset of the COVID-19 pandemic highlighted many major shortcomings of LTCH infection prevention and control (IPAC) policies and practices.

In fact, by April of 2020, LTCH residents had contributed to:

- 119 deaths, with a case mortality rate of 16% between March and April of 2020 in Ontario<sup>2</sup>
- Over 80% of COVID-19-related deaths in Canada during the first wave of cases<sup>3</sup>

## 2– Rationale and Purpose

The literature has begun to explore the shortcomings that contributed to the vulnerability of LTCHs throughout the pandemic. Some main causes include 4, 5, 6:

- Underfunding
- Inadequate personal protective equipment (**PPE**)
- **Built environment** challenges
- Poor **knowledge of (IPAC)** for LTCH staff/residents

to these failings, many researchers have identified the Due eventual start of a "culture change" for LTCHs <sup>4, 7</sup>. Education, updates to the built environment, and other funding, improvements to infection preparedness are being pushed.

### But how this "culture change" is being translated into real-life policy and practice?

This was an **identified gap in the research** that we seek to fill: a lack of understanding of changes in development and implementation of IPAC protocols in long-term care residences since COVID-19.





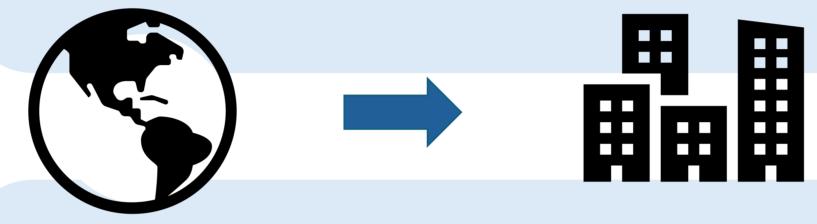
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## 3– Proposed Study & Scope

We seek to do a comprehensive analysis of **provincial**, municipal, and facility-specific policies and protocols for long-term care homes in Ontario since the onset of the COVID-19 pandemic.

## Our guiding research questions are the following:

- 1. How has the **COVID-19 pandemic impacted infection prevention** and control (IPAC) policies and practices in long-term care homes?
- 2. What are the key changes in these policies and practices on the provincial, municipal, and facility-specific levels?



## To answer these questions, we propose a qualitative, two-part study design:

**Part 1:** Policy and document analysis **Part 2:** Survey of key informants

## 4– Policy and Document Analysis

### **Data Collection**

A technical\* policy and document analysis will be conducted, reviewing IPAC protocols and reports<sup>8</sup>. We will first conduct a search for relevant documentation.

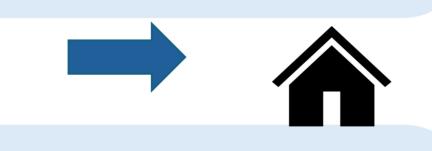
### Search Criteria:

- Published by the province of Ontario or by municipal public health units
- Publication year is **between 2020 and the present**
- Publications are about IPAC protocols and practices
- IPAC protocols are **specified to LTCHs**

### **Proposed Analysis**

- Qualitative analysis using a pre-designed policy-specific analytic framework <sup>9, 10</sup>
- Examine policy content and themes, as well as the evolution of protocols over the designated period
- **R** software to conduct preliminary counts of word/phrase frequencies and correlations, and content analysis
- **NVivo** software for conducting thematic coding

**\*Technical analysis** considers the planning, practice, implementation, and evaluation of policies.





## 5– Survey of Key Informants

## **Data Collection**

We will conduct a cross-sectional survey of key informants, which will collect data from those in professional and/or organizational roles which would impart knowledge about IPAC protocol development, enforcement, and implementation.

The **online survey design** will overcome barriers of key informant interviews, such as scheduling, time constraints, and biases arising from the interview context.

### **Recruitment Strategy:**

- Non-random, purposive sampling to find key informants
  - highest number of COVID cases in 2020
- Surveys will be conducted and delivered online
- facility (in Ontario)
  - directors of care, management

## **Proposed Analysis**

We will input data in the SPSS statistical analysis program to perform analyses of percentages and **frequencies of responses**, as well as **textual analyses** of written responses.

## 6– Next Steps

- 1. Finalizing a **methodology and analysis plan**
- 2. Database and literature **search** for policies and documents
- 3. Developing and **pre-testing** the survey
- 4. Recruitment and survey roll-out (data collection)
- 5. Data **analysis** and **writing**
- 6. Dissemination of research via thesis defense/publication







• Sampling will be conducted from municipalities with the

• This will identify those that demonstrated **poorer IPAC protocol/practice** at the beginning of the pandemic

Participants must be **involved in infection control** at Ontario Public Health, a municipal health unit, or in a long-term care

• **Example**: Policy-makers, public health staff, and

Participants must have **worked at their role for ≥3 months** 

