

# Strengthening Pandemic Preparedness in Long-Term Care

## Renforcer la préparation des établissements de soins de longue durée à la pandémie

Strengthening Pandemic Preparedness in Long-Term Care Program Delivery Team (including\* Richard H. Glazier, Joanne Goldberg, Jessica Hodge, Justin Lui, Kirstin Loates, Meghan McMahon, Jessica Nadigel, Ayah Nayfeh, Susan Rogers, Jane Rylett, Erin Thompson, Patricia Versteegh, Lindsay Yarrow and Jennifer Zelmer)

### Key Takeaways

- The COVID-19 pandemic has had profound impacts on residents, families, essential care partners and staff in long-term care (LTC), requiring a rapid system response to identify practical solutions for mitigating the effects of COVID-19 outbreaks and to inform future pandemic preparedness.
- Rapid research response programs, such as the Strengthening Pandemic Preparedness in Long-Term Care program, demonstrate the value of marrying quality improvement initiatives with implementation science expertise to find new and innovative ways of working together to better support the needs of residents, families, essential care partners and staff for greater system learning and impact.
- The sharing of key takeaways, implications and lessons learned from individual research projects can inspire spread and scale, and encourage reflection on the next steps for pandemic preparedness across the LTC sector.

### Abstract

In response to the COVID-19 pandemic, Healthcare Excellence Canada, the Canadian Institutes of Health Research and several provincial partners launched the Implementation Science Teams – Strengthening Pandemic Preparedness in Long-Term Care rapid research program. The program provided funding and a range of supports to the Implementation Science Teams (ISTs) that implemented and evaluated at least one of six promising practice interventions/policy options within Canadian long-term care and retirement homes. This article provides context in terms of introducing the purpose of this special issue and outlining the research initiative, the ISTs' research areas of focus and the program's overall reach.

### Résumé

En réaction à la pandémie de COVID-19, Excellence en santé Canada, les Instituts de recherche en santé du Canada et plusieurs partenaires provinciaux ont lancé le programme de recherche rapide « Équipes en science de la mise en œuvre : Renforcer la préparation des établissements de soins de longue durée à la pandémie ». Ce programme offre du financement et une gamme de services aux équipes en science de la mise en œuvre (ESMO) qui ont implanté et évalué au moins une de six pratiques ou politiques dans les établissements de soins de longue durée et les résidences pour personnes âgées au Canada. En guise de contexte, cet article présente l'objectif du présent numéro spécial et décrit l'initiative de recherche, les domaines de recherche des ESMO et la portée globale du programme.

\* In alphabetical order.

## Background and Impetus

The COVID-19 pandemic has had a profound impact on those who live and work in long-term care (LTC) and their family members. LTC residents accounted for more than 80% of Canada's COVID-19 deaths during the first wave, (CIHI 2020; Estabrooks et al. 2020) and harm in LTC quickly became one of the biggest patient safety issues across the country.

LTC homes faced many challenges during this time, including high rates of workforce infection, severe staffing shortages, lack of personal protective equipment and testing capacity and significant psychological and moral distress among staff (McGilton et al. 2020). Some residents faced unsafe and harmful living conditions, abuse and neglect, visitation restrictions, loneliness and psychological distress and significantly increased risk of death. Family members were often restricted access and could not provide care and comfort, including in times when their loved ones were dying during a COVID-19 outbreak (Stall et al. 2020). LTC homes have had to respond rapidly and seek practical solutions to support people and save lives.

At Healthcare Excellence Canada (HEC) and the Canadian Institutes of Health Research (CIHR), we partnered to find ways to strengthen pandemic response across the sector through the development and implementation of a rapid research response initiative that sought to improve LTC and retirement homes' pandemic preparedness and mitigate the effects of future outbreaks. Through this partnership, which was expanded to include provincial partners, cross-organizational resources were leveraged to support the rapid implementation and evaluation of interventions within LTC and retirement homes designed to support residents, families, essential care partners and staff during the COVID-19 pandemic.

The rapid research response initiative, called Strengthening Pandemic Preparedness in Long-Term Care (HEC 2022a), comprised 22 Implementation Science Teams (ISTs) (HEC 2022b) (see Figure 1). These ISTs involved:

- partnerships between researchers; LTC and retirement homes; and residents, family members and essential care partners with lived experience;
- co-design approaches to addressing the challenges; and
- implementation of scientific methods and rapid learning and improvement approaches (described below) to bring evidence to bear on improving pandemic preparedness and response.

Collectively, these ISTs partnered with 91 LTC and retirement homes across 10 provinces, caring for more than 14,000 residents. The ISTs focused on six promising practice intervention areas (discussed in the section "Overview of the Strengthening Pandemic Preparedness in Long-Term Care Initiative").

The advancement of learning health systems (LHSs) (Institute of Medicine of the National Academies 2007) or the continuous use of new knowledge and data to inform system improvement were important lenses that HEC and CIHR applied to the development of this program. We hoped that the IST projects would reinforce the benefits of continuous learning and improvement at the LTC home level and also inform LTC policy more broadly via lessons learned across teams. The ISTs worked to advance LHSs within their promising practice areas by studying what works for whom, under what circumstances and why. Generating a greater understanding of how evidence-informed practice can be implemented effectively was not only presumed to yield better care in the home but also lend itself to promoting future spread and scale that would allow for reach and impact across the system.

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**Ultimately, research** – specifically research guided by those with lived and living experience – can help to improve health system performance and the health and well-being of people, communities and populations.

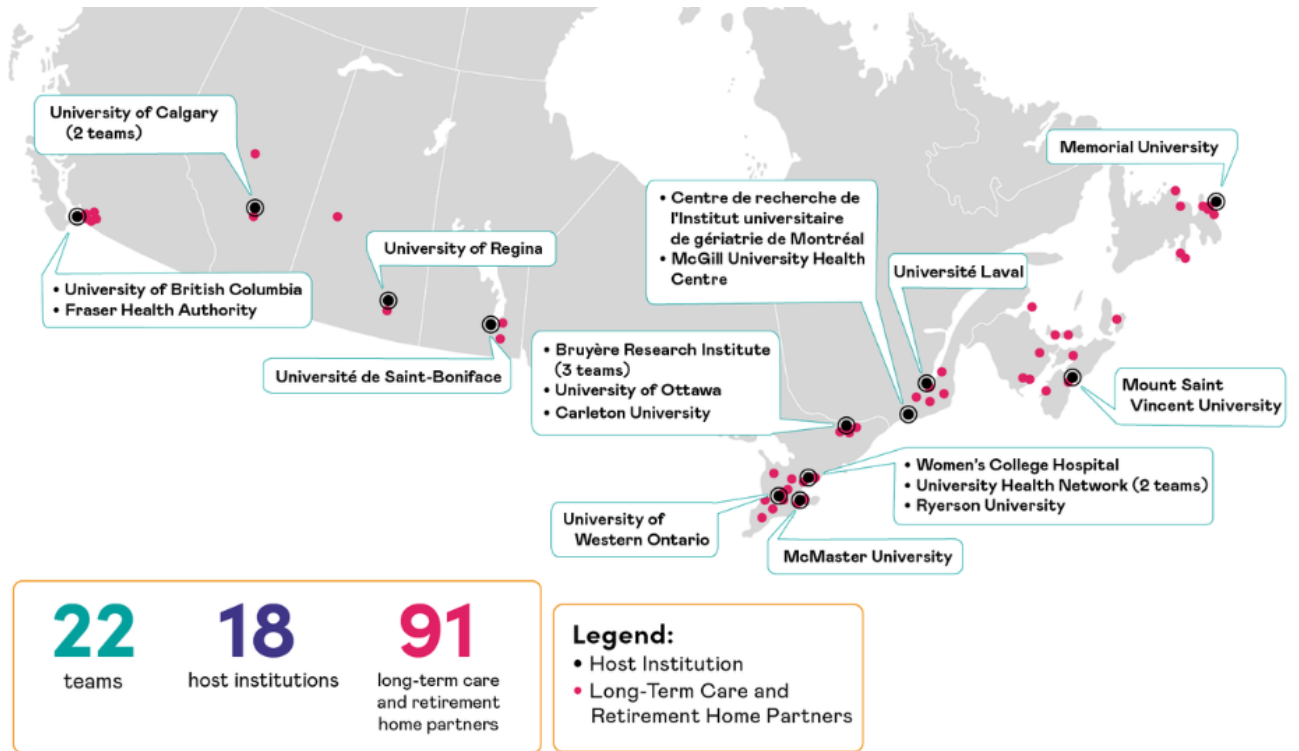
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## Purpose of This Special Issue

There is an important role for research evidence in health-care policy and the provision of care. Research is a powerful tool for developing and testing new innovative solutions, for understanding which interventions are effective and why, for informing changes and improvements that make interventions more effective and for supporting the spread and scale of successful interventions. The power of research can be reinforced by partnerships with people who can benefit from the findings as their lived experiences can guide the design and implementation of individual projects for greater applicability and relevance. Ultimately, research – specifically research guided by those with lived and living experience – can help to improve health system performance and the health and well-being of people, communities and populations. However, the power and potential of research are underutilized if the results are not shared with those charged with the complex task of designing and delivering health programs and services.

Therefore, through this special issue, we aim to share key takeaways and implications of the ISTs' work with the *Healthcare Quarterly* readership. Given the rapid nature of this program, our hope is that findings will quickly reach LTC stakeholders across Canada, inspire the spread and scale of individual projects and key lessons learned and/or encourage reflection on the next steps for what is needed in the sector with

**FIGURE 1.**  
**The Implementation Science Teams – Strengthening Pandemic Preparedness in Long-Term Care initiative**



Source: HEC 2022b

the ultimate goal of strengthening future pandemic preparedness and response efforts. Where applicable, the papers in this issue provide citations to additional resources that may be of interest to our audience.

The IST Strengthening Pandemic Preparedness in Long-Term Care initiative is one piece of the puzzle in addressing current challenges faced by the LTC sector. While situated in Canada, the issues confronted by LTC and retirement homes, the evidence-informed solutions implemented and the lessons learned may be of interest and relevance to all countries and health systems that witnessed a range of pandemic-related impacts in LTC.

### Overview of the Strengthening Pandemic Preparedness in Long-Term Care Initiative

Strengthening Pandemic Preparedness in Long-Term Care is built on and aligned with a rapid environmental scan and a

pan-Canadian quality improvement initiative (HEC 2022b), both led by HEC, to help support LTC and retirement homes to respond to the quickly evolving and adapting pandemic context.

The rapid environmental scan (HEC 2020a) was conducted at the outset of the pandemic and included key informant interviews with essential care partners, care providers and health system leaders across the country. It identified six promising practices and policy options to better prepare LTC and retirement homes for future outbreaks, including the following:

- *Prevention:* Implementing strong infection prevention and control protocols to prevent and mitigate outbreaks.
- *Preparation:* Ensuring that protocols are in place to respond to COVID-19 outbreaks.

- *People in the workforce:* Supporting staff to provide the best quality of care to residents.
- *Pandemic response and surge capacity:* Ensuring that appropriate measures are in place to provide surge capacity and reduce virus spread in the case of an outbreak.
- *Plan for COVID-19 and non-COVID-19 care:* Ensuring that residents have access to person-centred, integrated care to meet their unique health needs.
- *Presence of family and essential care partners:* Ensuring that homes recognize and support family and other caregivers as essential partners in care, policy and practice, including during outbreaks.

Building on the report’s recommendations, HEC launched the LTC+: Acting on Pandemic Learning Together quality improvement program (now known as Reimagining LTC) in July 2020 (HEC 2020b) to support LTC and retirement homes with the implementation of these promising practice areas and to help mitigate the impact of subsequent waves. More than 1,500 homes caring for over 180,000 residents came together to share experiences and best practices. HEC also provided coaching, virtual learning opportunities and seed funding to support and strengthen implementation.

Throughout the pandemic, rapid research has been essential for understanding the impact of COVID-19 and informing the health system’s response. The success of rapid research depends in part on ensuring that the infrastructure is in place to mobilize the best available evidence, rapidly evaluate the effects of policies and interventions in different settings and contexts and inform real-time learning and improvement. With that in mind, the Strengthening Pandemic Preparedness in Long-Term Care rapid research program was designed as a key complement to the LTC+: Acting on Pandemic Learning Together initiative.

Canadian LTC and retirement homes are characterized by considerable heterogeneity across regions and facilities in how care is funded, organized, managed, delivered and evaluated for quality and safety (CIHI 2021). Implementation science – defined as the scientific study of the methods and strategies used to implement evidence-informed interventions within routine healthcare in clinical, organizational or policy contexts – can be a pragmatic research option when such heterogeneity exists (BioMed Central 2020). Implementation science learns from real-world experience and generates insight on how best to adapt an intervention for successful implementation in different regions, conditions, populations and/or contexts. Essentially, implementation science seeks to answer this question using rigorous and pragmatic scientific methods:

What works for whom, under which circumstances, and why does it succeed or fail?

In September 2020, HEC and CIHR launched the rapid pan-Canadian call for proposals seeking ISTs in LTC (ResearchNet 2020). The goal of this initiative was to strengthen the pandemic response through the implementation of promising practice and policy interventions in different LTC/retirement home settings across Canada and generate evidence on which interventions and approaches are most effective, in which contexts and why.

IST applications were required to do the following:

1. comprise expertise in LTC and implementation science,
2. focus on the implementation of one or more of the six promising practice areas,
3. involve multiple LTC and/or retirement homes in at least two different jurisdictions (i.e., two different municipalities, cities, health regions or provinces/territories),
4. involve a decision maker from each LTC/retirement home with which they were partnering and
5. involve at least one resident/family member/essential care partner with lived experience in care for themselves or their family in a Canadian LTC/retirement home.

Proposals were evaluated in October 2020 by a pan-Canadian peer review panel of researchers, LTC leaders and residents/essential care partners. They were assessed for their research approach, the quality of their team (including the partnerships between the researchers and the LTC/retirement homes) and the potential for the research to make an impact. Successful teams were notified in November 2020 and granted \$150,000 for one year to support their work.

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Additionally, one of the ISTs received supplemental funds to lead a cross-team project to advance a common set of indicators and inform a collective understanding of the enablers of and barriers to implementation success and intervention impact. This project, called the Common Measurement Framework Project, generated a common set of indicators for measurement and reporting by all teams that captured the facility characteristics (e.g., ownership type, size, chain status, urban vs. rural locale), staffing characteristics (e.g., staffing level, skill mix),

resident characteristics (e.g., resident case mix, demographic characteristics), intervention characteristics and policy context of each partnering LTC/retirement home (Hardy et al. 2022). The Common Measurement Framework Project was launched at a time when momentum was building to develop Canada's first-ever national LTC standards and provided a timely opportunity to rapidly enhance the evidence base for LTC pandemic preparedness and meaningful indicators for measurement.

### Conclusion

It is critical that organizations find new and innovative ways of working together to better support the needs of residents, families, essential care partners and staff. The program partnership between HEC, CIHR and provincial partners demonstrates the value of marrying quality improvement initiatives with implementation science expertise for greater system learning and impact.

### Acknowledgment

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### Disclaimer

This work is supported by Healthcare Excellence Canada (HEC). HEC works with partners to spread innovation,

The commentaries featured in this special issue include voices of essential care partners and those of the participating LTC homes as essential program partners. Ultimately, healthcare is delivered with people and by people, and we cannot forget the “why” behind this important work. The commentaries also include syntheses framed around promising practice areas to distil key outcomes and findings. To situate this work within the broader LTC context and ongoing efforts to improve quality of care and quality of life in LTC, a commentary from Samir Sinha (2022) that sheds light on the parallel development of LTC national standards is provided. Finally, HEC and CIHR highlight the next steps for evidence-informed LTC pandemic preparedness in Canada.

We hope that you find this useful and informative. We encourage you to reach out to us for more information regarding any of these initiatives or promising practices. **HQ**

build capability and catalyze policy change so that everyone in Canada has safe and high-quality healthcare. The views expressed herein are those of the authors and do not necessarily represent the views of HEC.

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## About the Authors

The Strengthening Pandemic Preparedness in Long-Term Care Program Delivery Team includes representatives from HEC (Jessica Hodge, Justin Lui, Kirstin Loates, Ayah Nayfeh, Lindsay Yarrow and Jennifer Zelmer) and the CIHR (Richard H. Glazier, Joanne Goldberg, Meghan McMahon, Jessica Nadigel, Susan Rogers, Jane Rylett, Erin Thompson and Patricia Versteegh), who have contributed to the strategic development and operationalization of the Implementation Science Teams – Strengthening Pandemic Preparedness in Long-Term Care rapid research program.

On behalf of HEC and CIHR, Kirstin Loates can be reached by e-mail at [ist-esmo@hec-esc.ca](mailto:ist-esmo@hec-esc.ca) or [kirstin.loates@hec-esc.ca](mailto:kirstin.loates@hec-esc.ca).