



Co-RIG Project

# Supporting Palliative and End-of-Life Care During COVID-19: Prescribing practices in long-term care homes

**Project lead:** Peter Tanuseputro, MD, MHSc, CCFP, FRCPC, Scientist, Clinical Epidemiology Program, Ottawa Hospital Research Institute

**Project location:** Ontario

## Summary

Nearly all residents in long-term care (LTC) homes can benefit from palliative care and end-of-life symptom relief.<sup>1</sup> By examining medication prescribing and mortality data from Ontario long-term care homes, the research team identified gaps in the prescribing of medications at the end-of-life. These findings are supporting targeted education and resource building for long-term care homes with low prescribing rates. This will have a direct impact on the standard of end-of-life care across the province.

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## Faces of COVID-19

### Quality of life until the end of life

Isabelle, aged 90, was a librarian and active community volunteer before she broke her hip. After a period of steady decline, she moved into a LTC home in Ottawa. She was in stable health when she was contracted COVID-19. The home has provided care for COVID-19-positive residents throughout the pandemic and as Isabelle's condition worsened, her care was modified to include injectable medications to control her pain, agitation, and shortness of breath. This was facilitated by a palliative care symptom relief kit, ordered by her physician through a standardized order sheet. She died peacefully.

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## Project detail

Residents in LTC homes are generally frail and older. On average about one in five Ontario LTC residents dies annually from various causes.<sup>2</sup> Throughout the pandemic the majority of COVID-19 deaths in Ontario occurred in LTC settings.<sup>3</sup>

With Co-RIG funding Dr. Peter Tanuseputro and team developed an approach to examine prescribing rates for end-of-life symptom relief medications (i.e., injectable medications for pain, agitation, etc.) across all LTC homes using routinely-collected health administrative data. Evaluating the proportion of decedents who were prescribed at least one of these medications in their last two weeks of life is a potentially useful proxy for the quality of palliative and end-of-life care delivery.

Prescribing rates were measured in LTC homes across the province with large variations observed in prescribing prior to and during the COVID-19 pandemic. These observations suggest potential variations in care, ranging from excellent to sub-optimal.

Dr. Tanuseputro's work will help the Ontario Palliative Care Network (OPCN)—funded by the Ontario Ministry of Health and Ontario Ministry of Long-Term Care—and other organizations in Ontario identify gaps in delivery of high-quality end-of-life care in LTC and help focus additional supports where they were most needed.

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## Impact

- **Quality improvement:** The team's partners will use findings to target LTC homes for education on palliative and end-of-life drugs and usage. As a system performance indicator, end-of-life medication prescribing rates can help drive quality improvement on a population level.
- **Furthering research:** This can help health system partners understand prescribing patterns across facility, physician, and LTC resident characteristics. Data can help inform intervention strategies to improve palliative and end-of-life care and ensure the final weeks of life in LTC are as peaceful as possible.
- **Building capacity:** The approach can be adopted by researchers in jurisdictions that have linked data systems like Ontario, both during and following the COVID-19 pandemic.

## Results to date

- Preliminary data show that 67.4 per cent of LTC residents in the two years prior to the start of the COVID-19 pandemic received at least one subcutaneous palliative care medicine in the last two weeks of life. This percentage dropped slightly to 64.1 per cent during the first six months of COVID-19.
- An opioid was prescribed to over 60 per cent of residents before they died; other therapies such as benzodiazepines and antipsychotics, (about 20 per cent each) commonly used to treat non-pain related symptoms, were prescribed significantly less often.
- Of the more than 600 Ontario LTC homes, the top 20 per cent of homes with the highest prescribing rate provided at least one palliative medication in, on average, 96 per cent of decedents. The lowest 20 per cent of homes prescribed at least one medication in only 24 per cent of cases on average, suggesting the possibility of undermanaged symptoms and mental/emotional discomfort.

## Methodology

- Describe prescribing patterns (before and during the COVID-19 pandemic) of medications used for symptom relief at end-of-life for LTC residents.
- Evaluate impact of COVID-19 outbreak status on end-of-life prescribing.
- Discuss findings with the OPCN and other partners to create regular measurement of this potential quality indicator and intervene to improve end-of-life care across LTC homes.

“This project is an example of the innovative ways that data can shine light to an important patient issue—to highlight areas where physicians and other health care practitioners can work to improve the quality of life of those under their care.”

– Dr. Peter Tanuseputro, project lead

<sup>1</sup> Canadian Institute for Health Information. Access to Palliative Care in Canada. Ottawa, ON: Canadian Institute for Health Information; 2018. Available from: <https://www.cihi.ca/sites/default/files/document/access-palliative-care-2018-en-web.pdf>. Accessed May 19, 2021.

<sup>2</sup> Tanuseputro P, Chalifoux M, Bennett C, Gruneir A, Bronskill SE, Walker P, et al. Hospitalization and Mortality Rates in Long-Term Care Facilities: Does For-Profit Status Matter? *J Am Med Dir Assoc*. 2015;16(10):874-83. <https://pubmed.ncbi.nlm.nih.gov/26433862/>.

<sup>3</sup> Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Epidemiologic summary: COVID-19 in Ontario – January 15, 2020 to April 17, 2021*. Toronto, ON: Queen's Printer for Ontario; 2021. Available from: <https://files.ontario.ca/moh-covid-19-report-en-2021-04-18.pdf>. Accessed May 19, 2021.

### Project team

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### Partners

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Ontario Ministry of Health and Long-term Care

Ontario Palliative Care Network (OPCN)

For the End-of-Life Prescribing in Long-Term Care Homes Team, Ottawa Hospital Research Institute and Bruyère Research Institute.

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