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Using linked administrative data to evaluate and improve the quality of end-of-life care in nursing homes.

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Objectives

Prescribing of symptom management medications may reflect the quality of end-of-life care provided to nursing home residents who are nearing death. The objective of this study was to examine variations in the prescribing of end-of-life symptom management medications in nursing home residents in the last 14 days of life.

Approach

This was a retrospective cohort study of nursing home residents age 65+ who died in Ontario, Canada between January 2017 and February 2020. Through expert consultations, we compiled a list of medications used to manage common end-of-life symptoms. Using routinely collected health administrative data held at ICES, we linked resident data to prescription claims to identify whether residents were prescribed these medications in the last 14 days of life. We grouped nursing homes into quintiles according to the proportion of decedents in a home who received $\geq$1 prescription and examined variations in resident and facility characteristics across quintiles.

Results

There were 55,029 deaths across 626 nursing homes. Overall, 64.8% of residents received at least one end-of-life symptom management medication. The proportion of dying residents who received $\geq$1 end-of-life medication ranged from 37.6% in quintile 1, 59.8% in quintile 2, 69.1% in quintile 3, 74.8% in quintile 4, and 82.9% in quintile 5. Opioids were the most commonly prescribed medications, with an average of 62.2% of residents receiving a prescription (35.9% to 81.2% across the quintiles). Nursing home residents that resided in homes in the lowest prescribing quintile were older and more likely to be Allophones (first language not English or French). Low prescribing homes were also larger, with a higher number of beds, and were more likely to be in rural areas.

Conclusions

The observed variations in the prescribing of medications to manage end-of-life symptoms in nursing home residents raises concerns that some residents may have received inadequate end-of-life symptom management. Prescription data may provide an opportunity to rapidly evaluate the quality of end-of-life care in nursing homes at a population level.

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