Monitoring health service use at the end of life in the Calgary Zone of Alberta: a Population-level analysis linking multiple administrative datasets

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Introduction

As part of the Alberta Health Services (AHS) Calgary Zone Healthcare planning, a Palliative and End of Life Care Program (PEOLC) dashboard was developed and face validity of the indicators was examined by key stakeholders such as clinicians and decision makers.

Objectives and Approach

An internal dashboard was developed to explore End of Life (EOL) indicators that could provide evidence to support local PEOLC planning. Multiple administrative datasets available to AHS were used to estimate population needs of palliative care, current state of resource use, and EOL quality indicators. Underlying cause of death in Vital Statistics data was used to calculate minimal and maximal population estimates of palliative care needs between 2000 and 2014. Trends in acute care use during the last year of life were analyzed. Overall rates and geographic variations of selected indicators in Calgary Zone were reported.

Results

Over the period 2000 to 2014, number of adult deaths increased in Calgary Zone, from 5,094 in 2000 to 6,823 in 2014. In 2015/16, about half of all 10,848 hospital discharges in the last year of life were incurred in the last 60 days of life, and about 40 percent were incurred in the last 30 days. Overall, 11% of decedents visited ED more than once, 7% were discharged from hospital more than once, 19 % spent more than 14 days in hospital. According to the ED and inpatient data, 40.7% of decedents, roughly 3,000 people, died in hospital. We observed an urban rural continuum gradient in most of these indicators, with rates varying more than two-fold for ED and hospital discharge related indicators.

Conclusion/Implications

The project demonstrates the feasibility of using existing data to generate information to support the PEOLC program plan-