

**THE HEALTH CARE COST OF DYING:
A POPULATION-BASED RETROSPECTIVE COHORT STUDY
OF THE LAST YEAR OF LIFE IN ONTARIO, CANADA (PUBLICATION)**



**PETER TANUSEPUTRO, WALTER P. WODCHIS, ROB FOWLER,
PETER WALKER, YU QING BAI, SUE E BRONSKILL, DOUGLAS MANUEL**

CONTEXT

Coordinated and appropriate health care across sectors is an ongoing challenge. The baby boomer cohort effect coupled with an extension of life-expectancy has led to great concern among funders and policy makers that elder and end-of-life care will place unprecedented strain on the publicly funded health care system. However, there is currently little population- and system-wide data to identify the relative contributions of patient characteristics and components of healthcare delivery responsible for healthcare costs at the end of life. Moreover, population-level data on end-of-life health care use and cost are seldom reported across a comprehensive array of sectors, which has a potential in identifying the level of care being provided and areas where care can be optimized.

OBJECTIVES

This study aims to inform healthcare practitioners on the broad health care use of patients prior to death. At a population level, the study looks beyond the effects of demographic pressures, to examine the relative contributions of sector-specific health care use to overall costs as death approaches.

METHODS

A retrospective cohort study was conducted to examine health care use and cost incurred by decedents in their last year of life, by capturing all deaths in a 3-year period from April 1, 2010 to March 31, 2013 in Ontario, Canada. Using encrypted health card numbers as unique identifiers, records of health care use and costs were linked across various administrative databases. All records of health care use paid for by the provincial Ministry of Health and Long Term Care in the last year of life were retrieved, and person-level health care expenditures were examined. Health sector cost for the population was the sum of all costs among decedents captured within each respective sector. Total cost within each sector by month prior to death was also examined.

FINDINGS

Among 264,755 decedents, the average health care cost in the last year of life was \$53,661 (Quartile 1-Quartile 3: \$19,568-\$66,875). The total captured annual cost of \$4.7 billion represents approximately 10% of all government-funded health care. Compared to an age-sex matched survivor cohort during the same period, decedents consumed 6.7 times greater mean cost. Inpatient care, incurred by 75% of decedents, contributed 42.9% of total costs (\$30,872 per user). Physician services, medications/devices, laboratories, and emergency rooms combined to less than 20% of total cost. About one-quarter used long-term-care and 60% used home care (\$34,381 and \$7,347 per user, respectively). Total cost did not vary by sex or neighborhood income quintile, but were less among rural residents. Costs rose sharply in the last 120 days prior to death, predominantly for inpatient care.

CONCLUSIONS

This study improves our population-level understanding of health care use at the end-of-life. Knowing, for example, the proportion of the population that used long-term care or home care, or the proportion that were admitted into hospital and/or ICU informs conversations around the end-of-life experience. For policy makers and health care planners, this study identifies the sectors that are important to target from a cost perspective.

FOR A COPY OF THE FULL REPORT [CLICK HERE](#) OR VISIT OUR WEBSITE <http://hsprn.ca>