

**Aggressiveness of End-of-Life Care for Patients with Colorectal Cancer in Alberta, Canada: 2006-2009**

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**Abstract:**

**CONTEXT:** North American studies have documented practice variations and deficiencies in end-of-life (EOL) cancer care, such as trends toward treating dying patients aggressively and disparities in access to palliative care or hospice services.

**OBJECTIVES:** To assess the frequency of aggressive health care usage at the EOL and identify factors associated with receiving aggressive care among patients who died of colorectal cancer.

**METHODS:** Data from the Alberta Cancer Registry, in/outpatient hospital records, and cancer electronic medical records were linked. Death in an acute care hospital, chemotherapy use in the last 14 days of life, more than one emergency room (ER) visit, more than one hospital admission, and any intensive care unit (ICU) admission in the last 30 days of life were used as indicators of aggressive care. Logistic regression was used to identify risk factors associated with each indicator.

**RESULTS:** A total of 2074 patients were included: 50.1% died in an acute care hospital; 3.7% received chemotherapy in the last 14 days of life; and 12.5% had multiple ER visits, 9.5% had multiple hospitalizations, and 2.2% had an ICU admission during the last 30 days of life. Age had the strongest association with chemotherapy use. Geographical region of residence had the strongest association with multiple ER visits and hospitalizations and dying in an acute care hospital. Tumor stage and duration of disease were associated with the ICU admission.

**CONCLUSIONS:** The percentage of patients who died in an acute care hospital is higher than the 17% U.S. benchmark. Other indicators of receiving aggressive EOL care are consistent with existing care quality benchmarks. The considerable regional variation, however, indicates potential for system improvements.

**Comments:**

**Strengths/uniqueness:**

Given the difficulty in accessing databases this is a very useful publication on an increasingly topical issue. The definition of "aggressive care" is based on the literature standard and is easily reproduced.

**Weakness:**

The ability to link with databases from Zone Palliative Care programs would be a major enhancement. The focus on location of death rather than location of care for the 6 months before death is a significant limitation.

**Relevance to Palliative Care:**

The study is very useful in highlighting regional differences and the potential disparity of palliative and EOL care services. As planning and discussion proceeds toward developing a provincial palliative care program this publication and further research reports on other cancers and EOL conditions could be extremely useful for advocacy and program design.