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Emergency Department Use in Patients with Cancer: A Population-Based Study

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Introduction

Emergency Department (ED) visits in cancer patients represent a significant burden to both patients and the health care system. Emergency Care of cancer patients is complex compared to the population. There is lack of knowledge regarding the pattern and reasons for ED visits in this population.

Conclusion/Implications

These data suggest high ED utilization by cancer patients, and variation in utilization by cancer type. Identifying the timing and risk factors of ED visit for each cancer type, especially on frequent ED users presents opportunities to improve care in oncology clinics and ED.

Objectives and Approach

We sought to identify factors and patterns associated with ED use among cancer patients, in the first year after diagnosis. Adult cancer patients diagnosed between 2011 and 2013 were identified from the Alberta Cancer Registry. This was linked with cancer related treatments extracted from medical records system at provincial cancer centers. ED visits and outpatient clinics were acquired from National Ambulatory Care Reporting System (NACRS). Databases were linked by unique patient identification number. Previous cancer patients were defined by having at least one cancer related diagnosis in NACRS before. The other patients were treated as non-cancer patients.

Results

Cancer patients accounted for 6.7% of ED visits and 10% of ED hours. They had higher male percentage (53% vs. 49%), higher admission rate (23% vs. 10%), ambulance usage (20% vs. 12%) and longer stay (LOS) (171 vs. 131 mins) compared to non-cancer patients. 24% of cancer patients had 4 or more ED visits/year and accounted for 59% of visits. Lung and liver cancer patients had higher ED utilization than patients with other cancers. Breast cancer patients had more after-treatment-ED-visits (41% within a week vs. 26% in lung cancer). Use of ED was highest within 1 month of diagnosis for all types except breast cancer, which was highest at 2 months after. Differences were observed between urban and rural area for numbers reported above.

