

Systematic Review of Hospital Readmissions Among Patients With Cancer in the United States

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Bell, Poghosyan, Lash, Kim, Bold, and Joseph contributed to the conceptualization and design. Bell, Whitney, Reed, Poghosyan, and Lash completed the data collection. Bell and Poghosyan provided statistical support. Bell, Whitney, Reed, Poghosyan, Lash, Kim, and Joseph provided the analysis. Bell, Whitney, Reed, Lash, Kim, Davis, Bold, and Joseph contributed to the manuscript preparation.

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Purpose/Objectives: To review the existing literature on readmission rates, predictors, and reasons for readmission among adults with cancer.

Data Sources: U.S.-based empirical studies reporting readmission rates from January 2005 to December 2015 were identified using four online library databases—PubMed, CINAHL®, EconLit, and the online bibliography of the National Cancer Institute's Surveillance Epidemiology and End Results Program. Some articles were identified by the authors outside the database and bibliography searches.

Data Synthesis: Of the 1,219 abstracts and 271 full-text articles screened, 56 studies met inclusion criteria. The highest readmission rates were observed in patients with bladder, pancreatic, ovarian, or liver cancer. Significant predictors of readmission included comorbidities, older age, advanced disease, and index length of hospital stay. Common reasons for readmission included gastrointestinal and surgical complications, infection, and dehydration.

Conclusions: Clinical efforts to reduce the substantial readmission rates among adults with cancer may target high-rate conditions, infection prevention, proactive management of nausea and vomiting, and nurse-led care coordination interventions for older adult patients with multiple comorbid conditions and advanced cancer.

Implications for Nursing: Commonly reported reasons for readmission were nursing-sensitive patient outcomes (NSPOs), amenable to nursing intervention in oncology settings. These findings underscore the important role oncology nurses play in readmission prevention by implementing evidence-based interventions to address NSPOs and testing their impact in future research.

Cancer care has been declared a crisis in the United States because of the growing demand for services, increasing complexity of treatment, and dramatically rising costs of care (Institute of Medicine [IOM], 2013). Some 1.6 million individuals are diagnosed with cancer each year, and the number of cancer survivors is projected to increase dramatically because of the aging population and improvements in treatment (American Cancer Society [ACS], 2016; IOM, 2013). By 2020, cancer care costs are expected to reach \$173 billion, reflecting a considerable increase from \$72 billion in 2004 (ACS, 2014; Smith & Hillner, 2011). At the same time, national reports criticize the quality of cancer care, calling for greater patient-centered focus; improved care coordination, with management of care transitions across settings; and cost containment through the reduction of preventable healthcare use (IOM, 2013; Smith & Hillner, 2011).

Programs and policies to reduce hospital readmissions are increasingly viewed as promising avenues to reduce spending and improve healthcare quality and efficiency as well as patient experiences (Naylor, Aiken, Kurtzman, Olds, & Hirschman, 2011; Robert Wood Johnson Foundation [RWJF], 2013; Schoen, Os-