Failure to Rescue in the Surgical Oncology Population: Implications for Nursing and Quality Improvement

Christopher R. Friese, RN, PhD, AOCN®, and Linda H. Aiken, RN, PhD, FAAN, FRCN

Purpose/Objectives: To analyze the frequency, type, and correlates of postoperative complications for surgical patients with cancer to illustrate practical application of the failure to rescue concept in oncology nursing practice.

Design: Secondary analysis of inpatient claims.

Setting: Data obtained from the Pennsylvania Health Care Cost Containment Council were linked with data from the Pennsylvania Cancer Registry.


Methods: Frequency distributions examined the incidence of each complication, the proportion of patients who died with the complication, and complication frequency by tumor type. Chi-square tests compared the frequency of complications for patients who were admitted routinely or via the emergency department.

Main Research Variables: 30-day mortality, postoperative complications, and tumor type.

Findings: The most frequent complication in the sample was gastrointestinal bleeding (13.2%); however, 37.1% of patients who died had respiratory compromise as a complication. Admission through the emergency department was significantly associated with experiencing a complication (71.9% versus 43.9%).

Conclusions: Treatable but serious postoperative complications are frequent and can be fatal in the surgical oncology population. Complication frequency and fatality vary significantly by cancer type.

Implications for Nursing: The complications studied are detectable by nurses and can be managed successfully with timely intervention. Recognition of complications at an early stage and evidence-based management may assist nurses in patient rescue and, ultimately, improve quality of care.