■ Article

From Evidence to Practice: Developing an Outpatient Acuity-Based Staffing Model

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Background: Reliable and valid outpatient oncology acuity-based staffing systems are lacking. The existing staffing model in a midwestern cancer center demonstrated inefficiencies related to unpredictable patient flow, treatment regimen complexity, and physician practice variation.

Objectives: A project was initiated to implement an evidence-based oncology outpatient staffing system maximizing patient satisfaction, employee engagement, and equity in workload distribution. The strength of evidence for 34 articles and 12 additional documents was moderate to strong, supporting development of an acuity-based staffing system. Evidence indicates that nursing assignments directly contribute to patient flow efficiency. An acuity point system was established.

Methods: A six-month pilot was completed comparing a control group to a pilot group, with defined maximum acuity points per nurse. Inter-group comparison included acuity scores, patient satisfaction, wait time, employee engagement, nurse overtime, and turnover.

Findings: Resultant changes included scheduled nurse time (preparation, charting, lunch breaks), revised acuity-based patient scheduling, and a revised nursing care delivery model. Implementation of the acuity-based system provided consistent staffing, improved efficiency, reduced overtime, and improved patient and staff satisfaction. Recommendations include adaptation of the acuity-based system to other outpatient settings and development of staffing level benchmarks.

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Oncology specialty care has transitioned from the inpatient to outpatient setting with more than 80% of care now provided in the outpatient area (Zabka, 2011). Outpatients treated for cancer are diverse and complex in their clinical presentations, with increased acuity influenced by comorbidities such as diabetes and heart disease. Provision of care emphasizes quality, patient and work environment safety, and reimbursement. West and Sherer (2009) defined quality care as having fewer medication errors and work-related injuries, and defined staffing mix and efficiency as key factors in sustainable cancer programs.

Outpatient chemotherapy infusion services have increased exponentially, creating a staffing challenge for nurses, managers, and administration. The staff at the current authors' 35-chair outpatient oncology chemotherapy infusion center recognized a need to ensure staffing levels to provide quality care, improve efficiencies to better distribute workload and reduce patient wait times, and improve patient and nursing satisfaction. Inefficiencies are influenced by people, practice, and the environment. Barton (2008) stated that the complexity of regimens, variations in physician practice patterns, and delays in other areas of administration contribute to nursing inefficiency in the outpatient setting. Scheduling inefficiency contributes to overtime, more nurses than patients, more patients than nurses, or the often-experienced "10 am to 2 pm patient crunch." Inadequate staffing models contribute to nursing job dissatisfaction and nurse perceptions that