Caring for Inpatient Boarders in the Emergency Department: Improving Safety and Patient and Staff Satisfaction

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Hospital capacity constraints lead to large numbers of inpatients being held for extended periods in the emergency department. This creates concerns with safety, quality of care, and dissatisfaction of patients and staff. The aim of this quality-improvement project was to improve satisfaction and processes in which nurses provided care to inpatient boarders held in the emergency department. A quality-improvement project framework that included the use of a questionnaire was used to ascertain employee and patient dissatisfaction and identify opportunities for improvement. A task force was created to develop action plans related to holding and caring for inpatients in the emergency department. A questionnaire was sent to nursing staff in spring 2012, and responses from the questionnaire identified improvements that could be implemented to improve care for inpatient boarders. Situation-background-assessment-recommendation (SBAR) communications and direct observations were also used to identify specific improvements. Post-questionnaire results indicated improved satisfaction for both staff and patients. It was recognized early that the ED inpatient area would benefit from the supervision of an inpatient director, managers, and staff. Outcomes showed that creating an inpatient unit within the emergency department had a positive effect on staff and patient satisfaction.

Background

Hospital capacity constraints including ED crowding are a widespread public health problem[1] and have been recognized as a national crisis for greater than 15 years.[2] It is estimated that 90% of hospitals in the United States experience the negative effects of ED crowding.[3] ED visits have increased by 26%, while the number of inpatient beds has decreased and many emergency departments have closed.[4] ED boarding and crowding have been reported to be detrimental to quality of care, as well as adversely affecting patient safety and satisfaction outcomes.[5] Long wait times adversely affect patients in multiple ways, such as delays in receiving critical medications[6] and pain management interventions,[6,7] medical errors,[8] and poor patient satisfaction.[9,10] ED crowding is compounded by hospital capacity constraints that delay movement of the patient from the emergency department to an inpatient room for care. Patients are often admitted but boarded in the emergency department until a hospital bed is available. Frequently, inpatient nurses are floated to the emergency department to care for patient boarders, creating a different set of nursing concerns as these nurses are challenged to provide safe inpatient care within the unfamiliar ED environment. Research evidence has found that work environments that optimize technology, work processes, and unit organization may substantially improve the use of nurses' time and the safe delivery of care.[11] Similarly, research exploring reductions in interruptions in nursing

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work has been found to reduce patient care errors.[12] Inpatient boarders create a unique and growing challenge to deliver inpatient care effectively within the ED setting. Boarding of admitted patients has been recognized as one of the major factors affecting ED crowding.[2,4,8,13]

Local Problem

Hospital capacity constraints and large numbers of patient boarders were adversely affecting the emergency department of Colorado's only academic medical center. This emergency department was built in 2004 for 30,000 patient visits per year; however, the number of visits was over 70,000 and hospital admissions were up by 20.84% by the end of fiscal year 2013. Increases in patient volume led to boarding inpatients in the emergency department for extended periods. Inpatient boarder numbers reached as high as 40 patients during any given shift, in addition to the emergency patients waiting to be seen. The volatility (patient turnover) and unpredictability of the emergency environment made it difficult to determine how many patients would be boarding during any given day or shift.

Capacity management solutions had been examined. Several surge areas and hallway beds were created throughout the hospital and emergency department to accommodate admitted patients. Hospital management redirected medical-surgical inpatient nurses to the emergency department to help take care of inpatients, allowing emergency nurses to remain free to care for emergency patients. Patients reported dissatisfaction with the care provided and boarding process. The annual employee opinion questionnaire identified staff dissatisfaction related to floating to the emergency department. After reviewing nursing survey data, hospital performance, and evidence from the literature,[14] a decision to involve the nurses in work-related improvement processes to improve overall work satisfaction and patient satisfaction was initiated. The nursing leadership team developed a quality-improvement initiative to address staff and patient dissatisfaction concerns.

Study Question

The aim of this quality-improvement project (QIP) was to improve satisfaction and processes in which nurses provided care to inpatient boarders held in the emergency department. The project sought creative solutions informed by inpatient and emergency nurses caring for boarders. The study utilized a method for writing clinical questions to search for evidence using the following criterion: patient or population, intervention, comparison, outcome, and time collectively known as PICO(T). The PICO(T) question was as follows: Does restructuring the care-delivery process for inpatient boarders in the emergency department improve patient and nurse satisfaction over an 8-month time frame? The specific questions that guided our study were as follows: (1) What process changes can be implemented in the current inpatient boarder area in the emergency department to improve registered nurse satisfaction? (2) Will changes in care-delivery processes improve satisfaction of patients boarded in the emergency department?

Methods

This QIP took place in a 34-bed level II emergency department in an academic medical center located in an urban area that has experienced a consistent growth in inpatient admissions. Hospital expansion to include doubling the emergency department was in the planning stages during this QIP. Institutional review board oversight was not obtained because this facility does not require this level of supervision for quality process–related projects. No patient- or staff-identifying information was obtained during the course of this process-improvement project.

PLANNING THE INTERVENTION

An interprofessional task force was developed to identify opportunities for inpatient boarder care-delivery systems and workflow process improvements and to explore creative changes. The team consisted of the following: ED and inpatient vice presidents, nursing directors, nurse managers, nurse educators, resource and staffing manager, research nurse scientist, and clinical nurse. The clinical nurse was the QIP lead nurse as part of her professional ladder development project. The task force met either weekly or monthly depending on the process-improvement interventions and need for team discussion, evaluation, and implementation steps.

UNDERSTANDING THE PRACTICE PROBLEM

A 3-pronged approach was used simultaneously to clearly identify what areas to improve for care and workflow. First, inpatient nurses who cared for boarders articulated care process concerns by writing multiple situation-background-assessment-recommendation (SBAR) communications. SBAR was used to provide a standardized structured communication method that enhances teamwork by focusing on specific concerns and suggesting changes to improve workflow.[15,16] Several SBARs identified lack of support services, specifically, lack of ancillary health technicians for blood draws and transport services for taking inpatient boarders to undergo studies (radiography, computed tomography scan, and so on). SBARs communicated the lack of equipment needed to care for boarders (eg, scanners for medication administration, electronic medication record, and