Pivot Nursing: Improving Emergency Department Input

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Structured Abstract

LOCAL PROBLEM
Inefficient procedures in place at any point in the emergency department (ED) can create a bottleneck and result in significant adverse effects, particularly for patients with time-sensitive conditions such as acute myocardial infarction, sepsis, or acute stroke. This project explores improving the input phase to ensure that patients presenting to the ED are assessed without unnecessary delay. The current set-up has patients that arrive to the ED waiting area to check-in with a registration clerk who enters the patient’s name, date of birth and chief complaint into Medhost, the ED electronic health record (EHR) and then registers the patient in Meditech for billing and insurance. The patient’s name appearing in the EHR is what alerts the triage nurse that there is a patient to be seen; there is no clinically trained person who is stationed in or with an unobstructed view of the waiting room. The triage nurse pulls the patient directly to an exam room if available or to the triage room and completes a focused assessment and documents chief complaint, vital signs, allergies, medical history, home medication list, surgical history, travel screen, sepsis screen, suicide screen, pain, and assigns an acuity level. The current process has ample room for error and the potential for adverse events to occur.

PROJECT PURPOSE
The purpose of this project was to implement an efficient, evidence-based triage process that ensures patients are assessed and placed appropriately while adhering to time sensitive ED protocols.

METHODOLOGY
John Kotter’s Change Model was utilized to guide this project. This eight-step model provided a systematic approach to implement the pivot nurse role. The setting for this project is a rural, community hospital with an ED that has a total of 18 beds. The current nurse staffing is four nurses on day shift and night shift, as well as two nurses that work from 9 a.m. to 9 p.m. and 11 a.m. to 11 p.m. respectively each day. Between the hours of 11 a.m. and 9 p.m. a nurse is placed next to the registration clerk to function as the pivot nurse with an unobstructed view of the waiting room, with an ultimate goal of implementing the pivot nurse process from 9 a.m. to 11 p.m. The population that comprised this project was every patient that presented to the ED during pivot nurse implementation times. The effectiveness of this project was measured by evaluating the door to provider time, door to bed time, and percentage of patients who left without being seen (LWBS) during the implementation period and comparing this to project goals and metrics from the same months of the previous year.

RESULTS
The goals of achieving an average door to provider time of ten minutes, door to bed time of eight minutes and LWBS of less than 1% were not achieved during the two-month implementation period. The pre-intervention door to provider (34 minutes), door to bed (23 minutes), and percentage of LWBS (5%) improved from the pre-intervention month compared to the post-intervention results. The results of the two intervention months are door to provider time of 27 and 30 minutes, door to bed time of 19 and 23 minutes and LWBS rate of 2% and 2.9% respectively. Also, the intervention metrics were slightly more than when compared to same month of the previous year to account for seasonal variability. There was not a statistically significant difference between the pre- and post-intervention months. It is important to note that during the two months prior to intervention a patient experienced an adverse event in the waiting area compared to no adverse events in the waiting area during the intervention period.

**IMPLICATIONS FOR PRACTICE**
The nurses were enthusiastic about the project; however, there was significant concern about the ability to maintain the pivot nurse role due to limited staffing. Utilizing the existing staffing matrix made implementing the project difficult to maintain during the designated times, due to the pivot nurse needing to assist in emergencies in patient rooms. Another barrier was not having an adequate number of nurses to staff the pivot position; during these times a paramedic or LPN was placed in the pivot nurse position with limited duties if available. Pivot nurse implementation increased the safety of the patients in the waiting area as evidence by no adverse patient events occurring in the waiting area during implementation period as compared to one adverse event during the two months prior to implementation. Though this site is a small ED and may not correlate to other facilities, adding a new staff position for the pivot nurse role would likely be more successful and allow for 24/7 implementation instead of during peak volume times. This project addresses the input phase, but the ED encounter is a complex process that requires a multi-step approach to address process issues and efficiency. To decrease the door to provider times at this site, future research needs to be completed to address possible inefficiencies and barriers in the throughput and output phases. ED triage and input is a prime topic for future nursing research.

*Keywords*: ED, triage, pivot nurse

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