RN PROCESS IMPROVEMENT: BARCODE MEDICATION ADMINISTRATION
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BACKGROUND

Medication errors have become a top priority for hospitals. The Institute of Medicine (2000) stated “each year an estimated 7,000 deaths are linked to medication errors” (ME). ME can occur at every step of the process from practice, ordering to administration. More than 30% of preventable ME occur at the point of administration (Leapes, Bates, Cullen, Laird et al, 1995). Barcoding Medication Administration is the system proven to help in reducing ME by verifying the 7Rs: Right medication, right patient, right time, right strength, right route, right documentation, right administration point of administration (Smeulers, Verweij, Maaskant, De Boer, Krediet, Van Dijkum, Vermeulen, 2015). To ensure patient safety and reduce medication errors our institution, a Level 1 Trauma and Academic Medical Center, implemented barcode medication administration (BCMA) in all nursing units.

THEORETICAL FRAMEWORK

Patricia Benner’s five stages of clinical competence “From Novice to Expert” provided the framework for the change in culture, attitude and practice. Novice nurses—New graduates or nurses with limited experience with computers were identified and given intensive training in classroom and at the elbow. Workflows were standardized. Front line nurses contributed to the selection of equipment, workflow designs and implementation plans.

Proficient nurses became members of the Nursing Informatics steering committee (shared governance) and were utilized as “super users”.

METHODS

- An electronic dashboard report that identified name of nurse and medications, date and time of administration and override reason was created. Data was analyzed, shared with leadership and individual nurses and posted on units boards.
- Proficient nurses were taken out of direct care once a month to participate in reviewing workflows and staff education.
- A comprehensive process that included re-education, just in time troubleshooting from Information Technology (IT) and weekly monitoring ensued.
- In 2017, weekly monitoring was initiated. Timely feedback was required from unit leadership and shared with senior leadership.

RESULTS

- In 2014, initial compliance was 90%. Analysis and Action plan was deployed.
- Compliance improved to 95% in 2015. A comprehensive process that included re-education, just in time troubleshooting from IT and weekly monitoring was initiated.
- Compliance improved to 96.4% in 2018.

OUTCOMES

- Compliance improved to 95% in 2015. A comprehensive process that included re-education, just in time troubleshooting from IT and weekly monitoring was initiated.

REFERENCES