

Increasing Barcode Administration In The Pre and Post Operative Units of A Large Academic Teaching Hospital

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Introduction: Barcode assisted medication administration (BCMA) is increasingly being adopted as an additional tool in the prevention of medication administration errors.

Identification of the Problem: In the pre and post operative unit of at large academic hospital, the institution wide goal of 95% compliance with BCMA scanning was not always being met.

QI Question/Purpose of the Study: For this QI study we asked the question – can the BCMA scanning score in the pre and post operative units be increased?

Methods: We performed audits using the hospital's electronic health software, interviews with bedside nurses and observations to determine the root cause of non-compliance. The results showed that there were several variables affecting nurses' ability to perform scanning.

Outcomes/Results: The variables included the environment, machines, materials, and methods. Poor wi-fi, no barcode on medication packaging, lack of individual phone chargers, short battery life, not running the latest iOS update, faded print on patients' wrist bands, location and number of charging stations were the main reason for non-compliance.

Discussion: Over three months, we implemented interventions to help combat these barriers. We huddled daily with nurses about the importance of BCMA scanning. We had one-on-one time with nurses who had a monthly score less than 95%. We educated staff on how to check individual scores and update their phones. We encouraged staff to leave their phones on the central charging station when off duty. We publicly acknowledged staff who achieved 100% compliance. We troubleshooted with IT department on how to decrease Wi-Fi issues. We collaborated with pharmacy to include barcodes for medications that lacked them.

Conclusion: Intradisciplinary, interdisciplinary and interdepartmental collaboration with nursing, IT and pharmacy positively impact BCMA scanning compliance. These countermeasures were successful in leading to an increase in compliance rate of 96.5%. While no system is perfect, BCMA scanning can contribute to a reduction in medication errors.

Implications for perianesthesia nurses and future research: Barcode medication scanning plays a vital safety role in the administration of medications preoperatively and post operatively. It is imperative for nursing leaders to search out the raw data and find trends and patterns that negatively impact compliance. Continuously analyzing the data allows for evaluating past and future implementations.