

Augmenting the 5 Rights: Improving Compliance with Barcode Medication Administration

Team Leaders: May Saulan MSN MPA CNOR AOCNS, Megan Belknap BSN CCRN,
Beth Taubkin MS RN CPAN

New York Presbyterian Weill Cornell Medical Center, New York, New York

Background information: The FDA receives more than 100,000 reports of medication errors every year in the United States. The use of technology in identifying the right patient, medication, dose, route and right time has been proven to be an effective tool in reducing, if not preventing medication errors. In October, 2020 the pre and post anesthesia units implemented barcode scanning to ensure safe and accurate medication administration. Although initial training with the barcode scanning device was provided to the nursing staff in these perianesthesia units, they still had difficulty utilizing barcode medication administration (BCMA) technology which led to a comprehensive review of current practices, challenges, and barriers related to BCMA.

Objectives of the Project:

- Promote a culture of safety regarding the process of medication administration
- Prevent drug-related errors by increasing compliance with BCMA technology
- Identification and resolution of barriers that prevent 100% BCMA compliance

Process of Implementation: Collaborated with our Quality & Patient Safety department to obtain monthly reports on staff compliance with BCMA. Conducted an assessment of current practice to identify barriers with the use of BCMA and implemented the following interventions to improve compliance: Staff In-service and 1:1 coaching emphasizing policy procedure and best medication administration practice. Collaborated with Pharmacy and IT departments to resolve scanner and barcode issues (device failure, barcode not available on various medication, barcode unreadable).

Statement of Successful Practice: Post-intervention, staff compliance with BCMA improved with a marked decrease in the top three compliance barriers that were addressed by the targeted interventions. Pre-intervention (June-October 2021) there were two medication errors in our PACU. Preoperative staff compliance scanning patient and medication was 87% and 85%, respectively versus 99% and 94% post-intervention (December 2021-February 2022). PACU staff compliance scanning patient and medication was 65% and 58%, respectively versus 88% and 84% post-intervention. During post-intervention months there was zero medication errors.

Implications for Advancing the Practice of Perianesthesia Nursing: Promoting perianesthesia nurses' engagement with the use of BCMA technology is crucial in order to minimize workarounds in the process of medication administration, thereby preventing drug-adverse events. Professional responsibility regarding the accurate and safe administration of medication must be emphasized.