Abstract

**Background:** The best intervention to decrease medications errors related to High-risk, High-alert (HRHA) medications is to implement double-check and second verification using the five rights of medication administration. The aim of this project is to evaluate the effectiveness and utilization of the Personalized Bar Code Identification (PBID) Card to verify HRHA medications and identify the key barriers to continuing adoption and ongoing use of the PBID.

**Intervention:** The HRHA Medication Verification Audit Tool was used to collect data from the medical records of patients that received HRHA medications in the four ICUs. Data was collected for: administered HRHA medication, primary RN who administered the HRHA medication and secondary RN who verified the medication. The Rogers theory of innovation was selected as the framework.

**Implementation:** Descriptive statistics, frequency, and percentages were used to compile and report all descriptive data. The percentage of medications that were ‘not verified’, ‘PBID verified’, and ‘verified’ using a method other than the PBID are calculated and compared using Z-tests for two proportions.

**Results:** The percent of the PBID verified medications (83.5%) was significantly higher than the percent of medications that were not verified (10.9%), $Z = 38.43, p < .05$. Also, the difference between the proportion of the PBID verified medications and those that were verified using another method (5.6%) was significant, $Z = 41.42, p < .05$.

**Conclusions:** Evaluation of the project shows that nurses generally tend to follow the standardized procedure for verifying HRHA medications in the four units.