Integration of Barcode Medication Administration in the Emergency Department: A Quality Improvement Project

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Introduction

- Medication errors cost the healthcare system an estimated \$2 billion annually.
- Barcode scanning medication administration (BCMA) technology reduces the incidence of medication errors.
- There is limited research on its effectiveness within the ED environment.
- Initial BCMA use in this ED was limited to only 13%.
- BCMA was prioritized as the preferred method for medication administration, with a compliance benchmark of 95% for the healthcare organization.



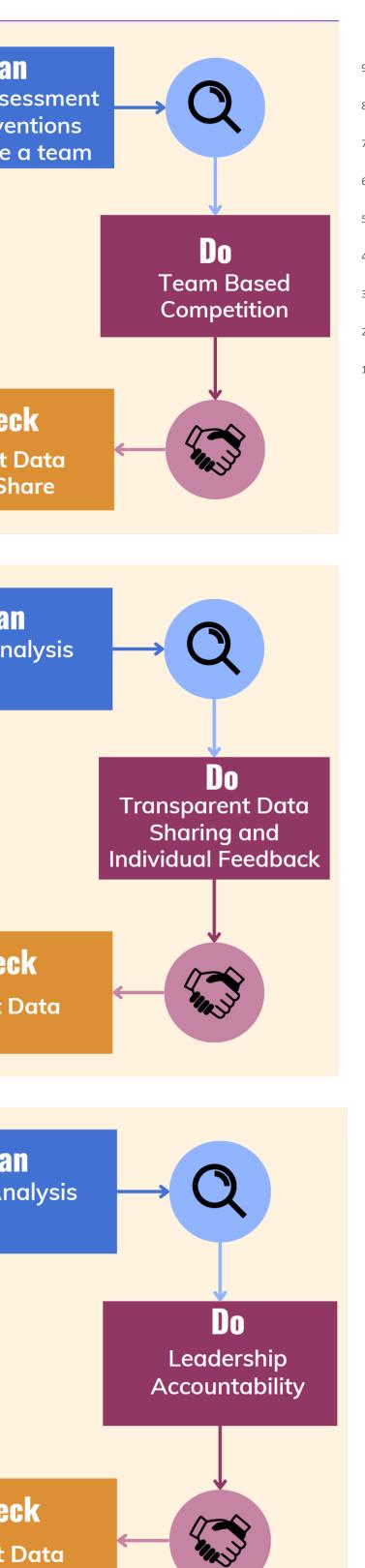
Plan Needs assessment IT interventions Assemble a team Act Award winners and begin next cycle with data trends Check \checkmark **Collect Data** and Share Plan Data Analysis Act Begin next cycle with data trends Check **Collect Data** Plan Data Analysis Act Sustainment Plan Check **Collect Data**

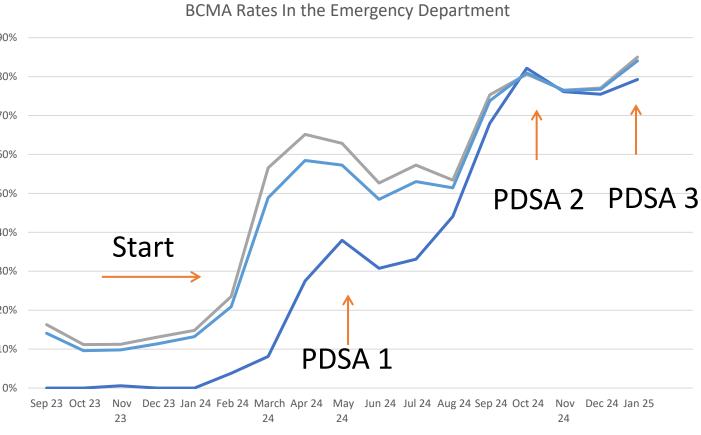
Methods



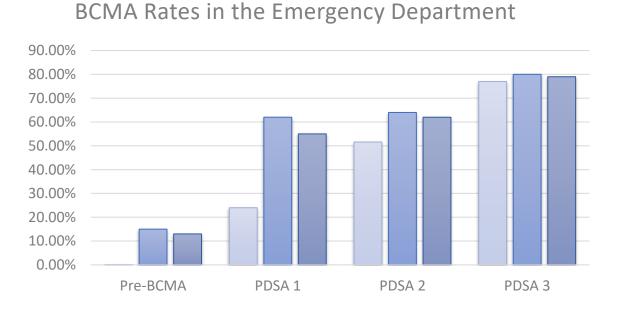
SCHOOL of NURSING

Results





Corpsmen



□ Corpsmen □ Nurses □ Department

Discussion/Conclusion

This project contributes to the existing literature by evaluating BCMA's effectiveness in a highstress ED setting. It offers insights into strategies for achieving high compliance rates in medication administration, even within complex clinical environments. This project also underscores the challenges of culture change and the significance of IT success and peer leaders in change.