Competition Increases Compliance

Jessi Riggins, BSN, RN, CPN; Beverly Barnes, RN, CBSN; Erin Ferris BSN, RN; Danielle Morris, BSN, RN, CPN; Mia Sharp BSN, RN, CCRN, CPEN; Beverley Wu, BSN, RN

INTRODUCTION

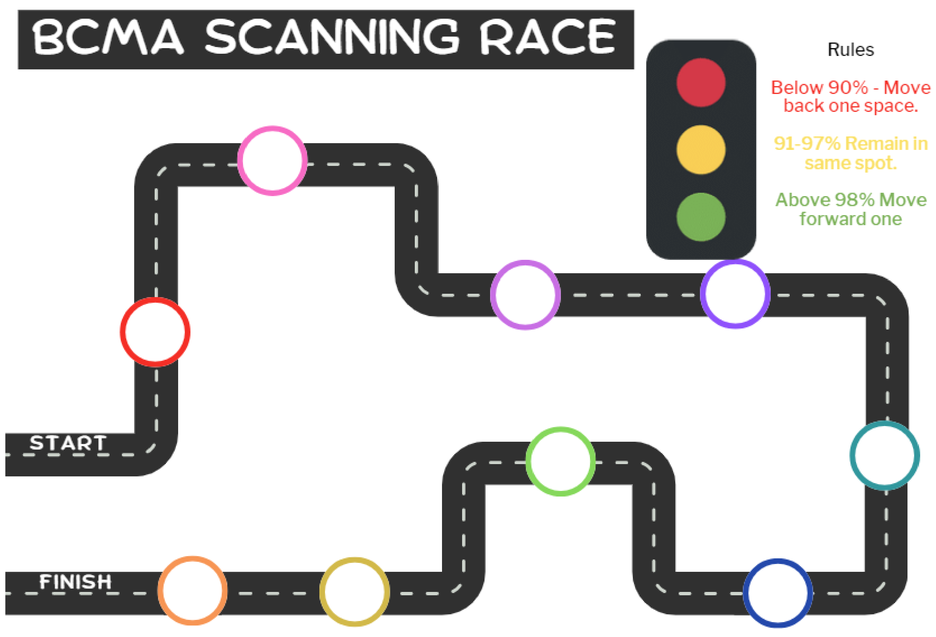
- An estimated 1.5 million adverse drug events (ADEs) occur in the United States each year as a result of medication mistakes (Aspden et al., 2006)
- Over 7,000 fatalities related to medication errors occur annually (Aspden et al., 2006)
- To avoid medication administration errors, Bar Code Medication Administration (BCMA) systems scan the patient's identification wristband and the drug to be administered
- 93% of medication errors are preventable using BCMA (Johnson et al., 2020)

OBJECTIVES

Increase barcode medication scanning to 98% or above in the Pediatric ICU through education and implementation of a BCMA scanning game from March 2023 to October 2023.

METHODS

- Increased awareness and educated staff members on the importance of medication scanning through staff forum presentation
- Implemented different variations of medication scanning games
    - Random teams of 5-6 nurses over a 4-week period (groups consisted of staff, travelers, nightshift, and dayshift)
    - Raffle prizes for individuals who had 100% scan rates (respiratory therapists were included in this round)
- A member from the leadership team reached out to gather information on barriers and provide education to individuals who scanned below 90%



BARRIERS

- High staff turnover with the influx of new staff members frequently made compliance and education difficult
- Pharmacy instructed nursing to use 'Five Rights of Medication Administration' instead of scanning when scanning issues arose
- Unit numbers included any RN/RT who administered medications in the PICU
- When nurses transport patients off the floor they do not have access to medication scanners, so meds administered in MRI and CT (such as sedation or contrast) are documented without scanning

RESULTS

- After implementing the game in May, PICU medication scanning rates have stayed above 98% every month (Table 1)
- Comparison of scan rates across the Children's hospital in January 2023 and October 2023 (Table 2)

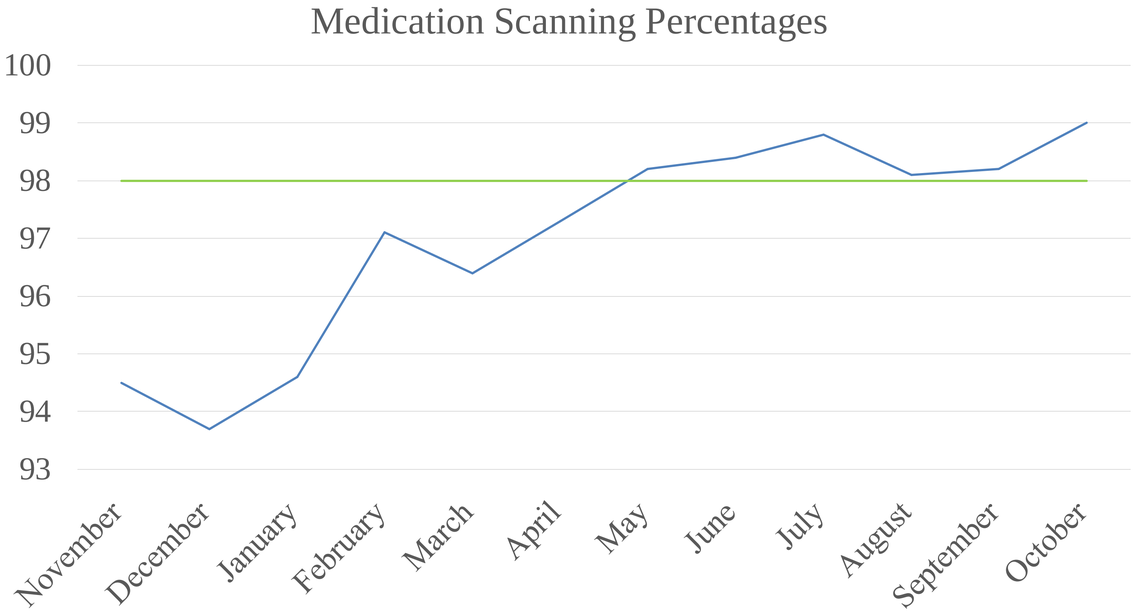


Table 1. Medication scanning percentages

	Unit	Intensive Care			Pediatrics		
		PCICU	PICU	NICU	3ETW	6EPI/7S	6TWR
Scan Rate	January 2023	97.5%	95.3%	97.7%	N/A	97.1%	97.8%
	October 2023	98.8%	99.2%	98.5%	98.2%	98.5%	99%

Table 2. Children's hospital scan rates

DISCUSSION

- This performance improvement project is aligned with our hospital service standard "Keep Me Safe"
- Since implementing the game, our Shared Governance Unit Practice Council:
    - Increased RN awareness
    - Encouraged accountability
    - Provided healthy competition
- Nurses held each other accountable and made a conscious effort to ensure patients were wearing their armbands and scanned before medication administration
- Unit BMCA scores improved as a result

CONCLUSIONS

Based on our results, our UPC plans to

- Identify additional barriers as to why individuals are documenting reasons for missed scan
    - Provide education and determine alternatives
- Create plans for sustainable ways to continue to improving medication scanning rates

References

Aspden P, Wolcott J, Bootman JL, Cronenwett LR, eds. "Preventing Medication Errors: Quality Chasm Series."Institute of Medicine (US) Committee on Identifying and Preventing Medication Errors, July 2006.. http://www.nationalacademies.org/hmd/~/media/Files/Report%20Files/2006/Preventing-Medication-Errors-Quality-Chasm-Series/medicationerrorsnew.pdf.

Johnson, CL, Carlson, RA, Tucker , Willette,C. "Using BCMA software to improve patient safety in Veteraons Administration Medical Centers." Journal of Healthcare Information Management 2020 Winter;16(1)46-51http://www.himss.org/using-bcma-software-improve-safety-veterans-administration-medical-centers. Accessed August 1, 2023.

Institute of Medicine (US) Committee on Quality of Health Care in America, Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (Eds.). (2000). *To Err is Human: Building a Safer Health System*. National Academies Press (US).

da Silva, B. A., & Krishnamurthy, M. (2016). The alarming reality of medication error: a patient case and review of Pennsylvania and National data. *Journal of community hospital internal medicine perspectives*, *6*(4), 31758. https://doi.org/10.3402/jchimp.v6.31758