

BACKGROUND

Problem Statement

- Medication override is the removal of medication from an Automatic Dispensing System (ADS) without a verified order
- Retrieved medications must be adequately documented to prevent administration error
- Medication Errors (MEs) rank highest in the categories of medical errors with huge financial impact
- Death from MEs = 2.34 per 100 hospital admission; prolonged hospital length of stay = 4.6 days at a total cost of \$5857 per occurrence

OBJECTIVES

Purpose

- Use education to increase nurses' awareness of proper documentation
- Reduce risk of injuries from lack of, or incomplete documentation of overrides
- Prevent appearance of nurses practicing outside of scope
- Observe Joint Commission Standard MM 4.10 regarding the need for review of all prescribed medications for appropriateness

Specific Aims

- Increase patients safety in the Intensive Care Units (ICU) regarding override medications
- Enable the organization to realize the quality and the financial benefits of medication administration technology



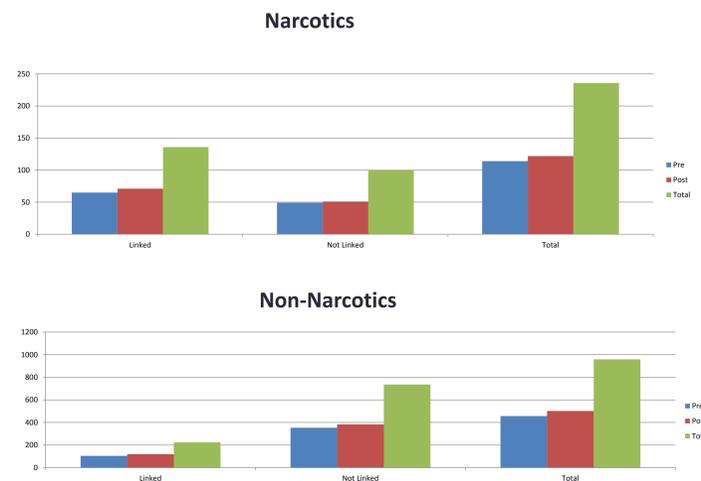
METHODS

- Plan Do Study Act (PDSA)
- 40 Registered Nurses from two ICUs
- Participants worked on the day, night, weekday and weekend shifts
- ICUs have more critical medications and have the potential for high incidents of overrides
- Data collection = daily reports on overrides in the Medical and Surgical ICUs
- Project site = public urban academic healthcare institution in the south-eastern United States
- Total patient volume for the two units in 2016 = 4,345
- The two ICUs = 60-bed unit

Interventions include:

- Hands-on training - demonstration of steps required to reconcile overrides
- Discussions during daily briefings at the beginning of each shift (huddles)
- Distribution of a step-by-step instruction ("quick guide") on override reconciliation
- "Quick guide" was laminated and shaped into identify card size for ease of carriage in badge holders

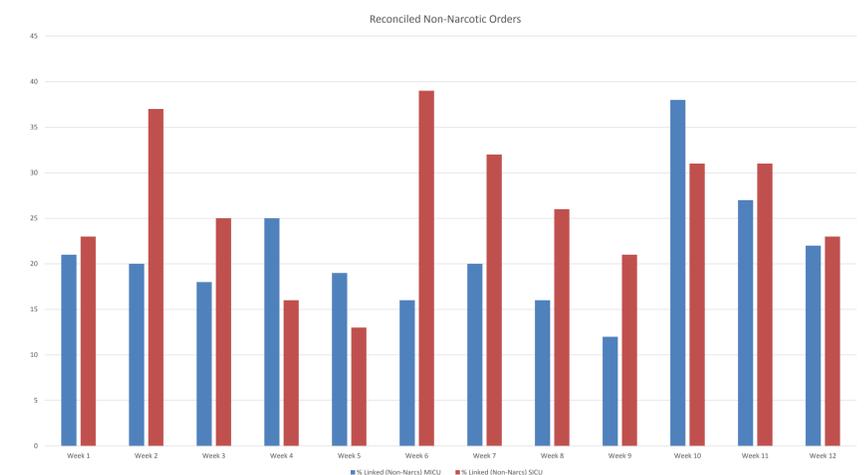
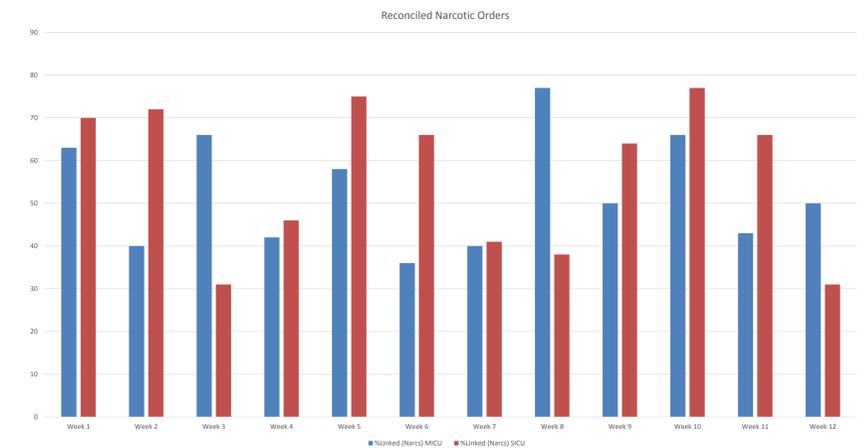
Comparison of the Pre and Post Intervention Narcotic and Non-Narcotic Medication Overrides in the Medical and Surgical ICU



DISCUSSION

- Many overridden non-narcotic medications were vasopressors
- Discrepancies between ordered and dispensed medications
- Reconstituted drugs were not documented on the flowsheet
- Undocumented administrations have financial implications
- Considerable time elapse between the placement of orders and pharmacy verification of orders
- Improper integration of the electronic system design with current nursing workflow

RESULTS



FUTURE STUDY

Future projects should examine:

- The use of nursing protocol to address system barrier
- The creation of panel of the vials and infusion drugs
- Combination of education, protocol and electronic reminders to improve the rates of documentation of overrides