Permission to Focus: Implementing a Medication Administration Time-Out

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Purpose

To determine whether minimizing interruptions during high volume medication administration times will decrease medication administration errors.

Background

- Administration errors account for 26% to 32% of total medication errors
- A study showed that the risk of procedural and clinical error increases when nurses are interrupted while administering medications
- Studies show that hospital culture has a permissive attitude toward interruptions
- Interruptions to nurses during the medication administration process need to be minimized to decrease medication errors

Method

- **Pilot Unit**: Wendel 2 (Orthopedic/Spine)
- **Task force**: Director of Nursing, Nurse Manager, Staff Nurses, Medication Safety Clinical Pharmacist, Nursing Quality Coordinator, and an Operational Systems Project Manager
  - **Goal**: Develop and implement a strategy to address the issue of interruptions during medication administration
  - **Process**:
    - Weekly task force meetings beginning January, 2015
    - Develop process flow diagram
    - Observe medication administration process
    - Identify factors causing the most interruptions to the medication administration process

Implementation

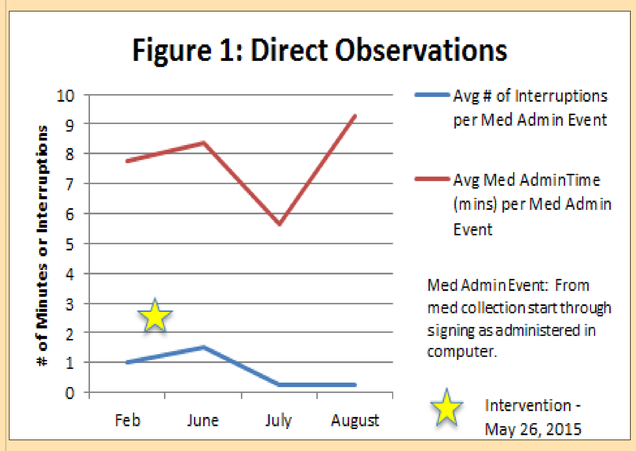
Each morning between 0830-0930 on Wendel 2:

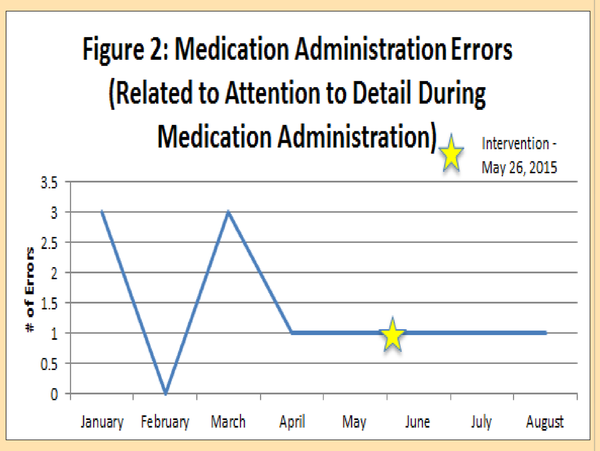
- Signs posted at the 2 main entrances to the unit and on each side of the Caregiver Team Stations
- Hall lights dimmed
- Phone calls received on the unit redirected as appropriate
- Messages for nurses recorded on a message pad kept at the Caregiver Team Station
- PT/OT to utilize a new process to decrease nursing interruptions
- Transporters to report to the Caregiver Team Station prior to approaching the nurse
- Units with patient transfers for W2 to call report prior to 0830 when possible
- MDs to please check with charge nurse prior to approaching primary nurse
- Nursing Assistants to use each other as resources as much as possible during this time
- Manager/Other Leadership to maintain an awareness of this process

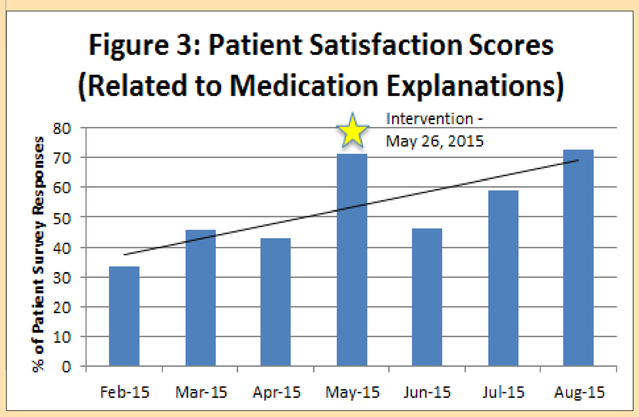
Outcomes

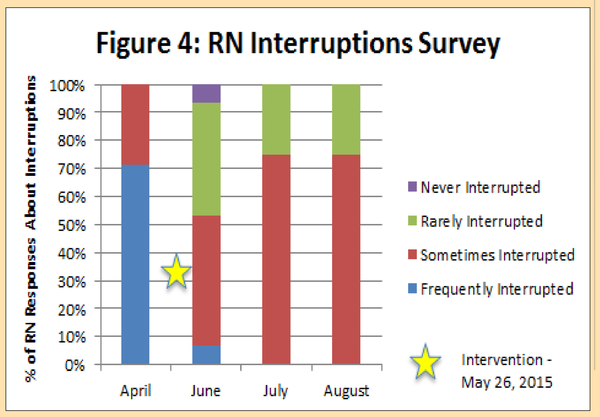
The following data was collected pre-implementation and at 1 month, 2 months, and 3 months post implementation:

- **Direct observations on Wendel 2:**
  - Number of interruptions
  - Amount of time the overall medication administration process took (defined as the time the nurse began collecting medications to the time the medications were signed as given in the computer)
- **Medication errors:** Related to "Attention to Detail" during medication administration on Wendel 2
- **Patient satisfaction scores:** Percent of patient responses indicating that the staff "Always" explained medication side effects. Data from the National Research Corporation
- **Nurse survey:** Perception of the number of interruptions by type by Wendel 2 day shift nurses





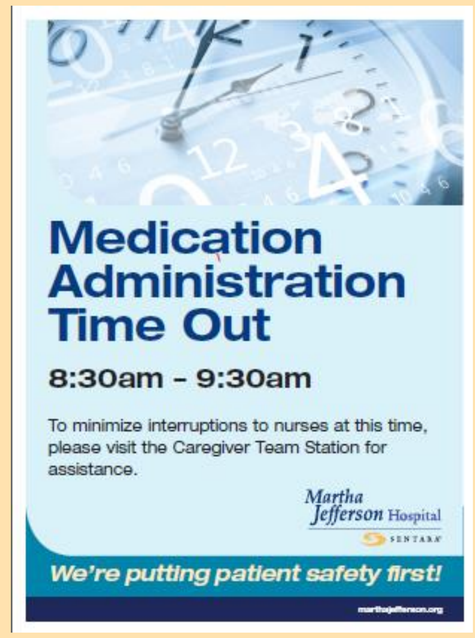




Conclusion

- **Direct observations:** The average and median number of interruptions decreased. While the average and median time for medication administration were not greatly reduced, it should be noted that the data was likely impacted by the addition of five new nurses within the three months of post-implementation data collection. With reduced interruptions, the nurses may also spend more time explaining medications to the patient during the process. (Figure 1)
- **Medication errors:** A decrease was recognized. (Figure 2)
- **Patient satisfaction scores:** A significant increase was noted. (Figure 3)
- **Nurse survey:** A decrease in interruptions was recognized. (Figure 4)

Based on the outcomes and positive staff feedback, Sentara Martha Jefferson Hospital will be considering implementing the medication administration time-out on other units.



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