

Minimizing Distractions and Interruptions at the Pyxis Machine Thus Improving Safety

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Introduction: Being a part of a busy Day Stay Pre-op /PACU unit, where surgeons, residents, anesthesiologists, CRNA's and nurses congregate in our nurse's station, can create a loud and distracting environment. This is where our PYXIS machine is located. We wanted to minimize distractions and interruptions while removing medications to reduce the incidence of errors.

Identification of the problem: We surveyed 29 of our co-workers. Twenty –three out of twenty-nine surveyed said they felt distracted while at the PYXIS machine. Fifteen of the twenty-three admitted that this caused an error. Most of the errors were counting errors and did not reach the patient.

EBP Question/Purpose: Does implementing a safety zone around the PYXIS machine minimize distractions and interruptions thus improving patient safety?

Methods/Evidence: Studies show that medication errors can increase by 12.7% with each interruption. Distractions and interruptions early in the task process are most prone to errors as opposed to errors in the later part of the task. Studies show there are three important steps to be taken to lesson interruptions during medication administration thus improving patient safety. First, there must be a safety zone to obtain, prepare and administer medication. Second, signs should be posted in areas of frequent interruptions. And third, education must be given to staff, providers, colleagues, patients and families about the importance of minimizing interruptions during the medication administration.

Significance of Findings/Outcomes: We implemented a safety zone which consisted of a square of red duct tape on the floor around the PYXIS, posted a sign to signify the safety zone and educated our colleagues. We conducted a post-implementation survey two months later. We concluded that designating a safety zone and educating staff overwhelmingly decreased distractions and interruptions at the PYXIS making it safer for patients.

Implications for Peri-anesthesia Nurses and Future Research: Implementing a safety zone around the medication dispensing areas can reduce medication errors and create a safer patient environment. At last years' National ASPAN Conference, only 50% of nurses we surveyed had a safety zone around their PYXIS. Forty-nine percent did not and twenty percent of those nurses stated they wish that they did have a safety zone.