Innovative Approaches to Reducing Nurses' Distractions During Medication Administration

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ABSTRACT

Background: Contributing factors to medication errors include distractions, lack of focus, and failure to follow standard operating procedures. The nursing unit is vulnerable to a multitude of interruptions and distractions that affect the working memory and the ability to focus during critical times. Methods that prevent these environmental effects on nurses can help avert medication errors.

Methods: A process improvement study examined the effects of standard protocols and visible signage within a hospital setting. The project was patterned after another study using similar techniques. Rapid Cycle Testing was used as one of the strategies for this process improvement project. Rapid Cycle Tests have become a part of the newly adopted Define, Measure, Analyze, Improve, and Control steps at this particular hospital.

Results: As a result, a medication administration checklist improved focus and standardized practice. Visible signage also reduced nurses' distractions and improved focus.

Conclusion: The results provide evidence that protocol checklists and signage can be used as reminders to reduce distractions, and are simple, inexpensive tools for medication safety.

Today's health care setting is a demanding place that lends itself to errors because of the nature of the environment and the fact that humans are not perfect. The staff skill mix and experience levels vary, and there are numerous and complex functions expected of each individual. Technological equipment and procedures are constantly evolving. In such a setting, there are few predictive controls leading to the potential for many problems.

Successful strategies used by other industries for reducing errors have also been recommended for health care. Research that uses teamwork, decision support, and checklists borrowed from the airline industry can contribute value to health care safety efforts (Agency for Healthcare Research and Quality [AHRQ], 2001). Pilots follow checklists directing appropriate actions, and do not engage in conversation unrelated to the flight during take-off and landing. Airline research indicates that errors have occurred most often because of failures in this type of teamwork and coordination. Similar complex work encountered in health care also requires teamwork and other strategies borrowed from aviation (Helmreich & Merritt, 1998). Thus, nurses could potentially prevent errors by using safety checklists and other practices during critical times. Reducing unnecessary conversation and other distractions would be an additional mechanism for medication delivery safety. To that end, redesigning the healthcare workplace to avoid interruptions has the potential to prevent errors.

ROLES AND FUNCTIONS

People in a work group frequently appreciate safety as a priority only if valued by the informal group leader. However, education also provides reasons and principles for changing behavior. Essentially, people will listen and abide by rules when provided with adequate grounds for the conduct (Geller, 2000). Ul-

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