

REDUCTION OF MEDICATION ERRORS ON A POSTPARTUM UNIT

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Purpose and PICO Question:

The purpose of this project was to see if medication errors on a postpartum unit could be reduced by real time verification and documentation of patient identification and medication administration. PICO question: On a postpartum unit will the use of an electronic device at the bedside at time of medication administration improve documentation and thereby reduce the rate of medication errors and improve patient safety?

Background and Evidence Review

On the maternity unit nurses were using a patient medication profile print out as a double identifier at the bedside. The possibility of medication errors included distractions for RNS after leaving the medication room, double administration of medication, giving a medication that has been changed or discontinued, and wrong time dosing. Literature review reinforces the patient safety aspects, accuracy and timeliness of bedside charting as a way of reducing medication errors and verifies that there was a large decrease in medication errors when computers were used at the patients bedside for charting.

Method

A preliminary audit for baseline data compared medication removal time and the actual charted time of medication administration. Data compiled included medication removed and not charted, and medication charted as given > or < 30mins from the scheduled time. The results were presented to staff in the form of poster boards, through email and at staff meeting's. Managerial approval for electronic devices (laptops and COWs –computers on wheels) was obtained. Staff were trained. The patient identifier printout was discontinued. A nurse educator was available on the floor to support staff the first week of implementation to ensure compliance of the project. After two weeks post implementation an audit verified that medication errors were significantly reduced.

Results

There was an overall decrease in medication errors from 11% at the pre-audit stage to 7% two weeks after bedside charting implementation, to 5% by the studies end. Also it should be noted that once bedside charting began no medication errors related to a wrong patient were seen at time of audits. Nursing administration embraced this process improvement and the positive outcome of this study by successfully obtaining an El Camino Hospital Grant to provide new computers in all the private rooms on this postpartum unit.

Conclusion

Some challenges of this study were nurse's reluctance towards change and new innovation. We experienced some early setbacks due to technical issues with the electronic devices which added to RN frustration with the disruption in workflow. However, once the implementation of bedside

charting during this small test of change was proven to decrease medication errors and enhance patient safety, there was positive incentive for the change. The results helped confirm the EBP to provide computers in every room of the new El Camino Hospital which will open in the next few months.

Selected references:

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Key words: Reducing Medication Errors, Patient Safety, Computers at the bedside, Nurse Charting.