Revolutions in Pharmacotherapy: "Optimizing Nursing practice with Technology"-
Medication process with "Bar code Medication Administration"

Ms. Deepti Sujata, Ms. Angela Das, Ms. Deepa Mariya Raju, Ms. Manju Tyagi
Sr. Quality Nurse, Quality Nurse, ANS- Training and Quality, CNO

Introduction

Medication safety is defined as the freedom from accidental injury due to medical care or medical errors during the medication-use, process, deserves the same prioritization, given the scope of medication use in patient care and the frequency and severity of potential harm.

A nurse is responsible for routine scheduled medications, which includes receiving medication from the pharmacy, segregation, preparation, administration, documentation and discard as per the hospital policy. Medication is such an inevitable role of the nurses where they need to be concentrated more and work precisely for the end-to-end process.

BCMA Barcode medication administration barcode medication administration (BCMA) has revolutionized medication administration in healthcare settings and greatly assists nurses in ensuring patient safety and medication accuracy. By scanning barcodes on both the patient's identification wristband and the medication packaging, nurses can verify the "six rights" of medication administration: right patient, right medication, right dose, right route, right time and right documentation. This technology helps reduce medication errors, enhances efficiency, and improves patient outcomes.

Problem Statement and Challenges

❖ Distraction of the nurses while administering medications.
❖ Nurses require thorough training on how to effectively use BCMA systems
❖ Reluctance in adopting the technology
❖ Integrating BCMA into existing nursing workflows is challenging. Nurses may need to adjust their routines and allocate additional time for barcode scanning, potentially leading to workflow disruptions and increased workload for some extend.
❖ BCMA systems rely heavily on technology, including barcode scanners and electronic health records (EHRs). Technical glitches, system downtime, or connectivity issues are disrupting the BCMA process.
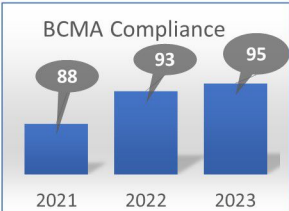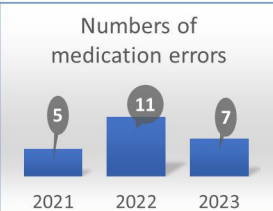
Action Plan:

❖ Nursing transformation for the Medication Nurse.
❖ Implemented Medication Nurse module to change the cadre to medication nurse. Only category B (Competent in the CAT assessment) nurse can do the medication for the patient after completing the medication nurse module.
❖ Mass training of Cat B staff on medication module.
❖ Medication Apron (shown in image) so that people will not distract them.
❖ Training of AIDET for the proper medication explanation.
❖ Coordination with Pharmacy for the barcode related issues and resolve the issues ASAP.
❖ Imitated for the healthy competition among the departments for best BCMA compliance "BCMA Campion"

AIMS & Objective

❖ Reduce the harm related to Medication by making nurses competent enough for the technology.
❖ Strengthen the medication process.
❖ Improve the awareness among the patient regarding safe medication practice by explaining AIDET.
❖ To improve the patient satisfaction and patient safety
❖ To improve the BCMA Compliances.

Numbers of medication errors
2021: 5
2022: 11
2023: 7

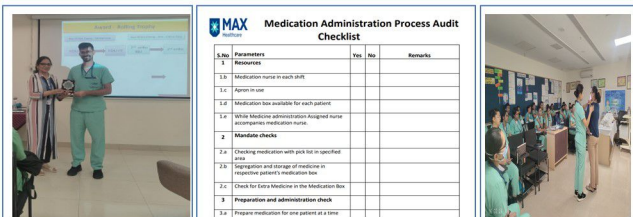**BCMA Compliance**
2021: 88
2022: 93
2023: 95

BCMA Process

Robust medication process Dedicated medication nurse in each shift, reconcile ensures the correct and timely safe medication administration which has reduced error up to all most zero

Medication Nurse | Medication receiving area | Dedicated storage area | Diabetic card | BCMA | Bed side scanning | scanning of correct medication | Cross checking

Results:

The outcome of the project is astonishing and inspiring to sustain the actions and audits. In the three year sustenance the number of medication errors reduced significantly and the BCMA compliance increased. The audits on the execution of AIDET is also pacing up with time. Emphasize on training and identified needs of retraining related to medication management is also vigorous that contributes to the remarkable outcome.

Medication Administration Process Audit Checklist

Discussion:

BCMA Process is effective in reducing medication errors, improving patient safety, and enhancing efficiency in medication administration workflows. BCMA impacts patient engagement and satisfaction as patients are also involved in BCMA and it improves the patient satisfaction. With the BCMA organization have reduced the incidents of medication and gradually improves BCMA Compliance. BCMA data provides the leverage for quality improvement initiatives, such as identifying trends in medication errors, monitoring adherence to protocols, and optimizing medication administration practices. The dedicated medication nurses with" DO NOT DISTURB" aprons help in good concentration and less error.