Medication Administration Accuracy

Standardizing Processes Improves Accuracy & Promotes a Culture of Safety

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Medication Administration Accuracy Project

Purpose

Medication Administration Accuracy Project (MAAP)

Purpose:
Increase the reliability of nursing compliance with standardized medication administration processes by engaging direct-care nurses in performance improvement.

Project Goal:
A standardized, highly reliable medication administration process that is duplicated across all care settings.

Goal #1 (Process Measures)
- **Increase compliance with the six processes for safe medication administration**
  - Compares medication to the medication administration record (MAR)
  - Minimizes distractions/interruptions
  - Medication labeled from preparation to administration
  - Checks two forms of identification
  - Explains the medication to the patient (as appropriate)
  - Charts medication immediately after administration

Goal #2 (Outcome Measures)
- **Increase compliance with the "five rights"**
  - Right patient
  - Right drug
  - Right dose
  - Right time
  - Right route

Background & Significance

Background:

2008 - UCSF Department of Nursing launched the MAAP project in an effort to reduce nursing medication administration errors.

2011 – Nurses on MAAP team collaborated with Pharmacy to perform the Annual Observation study.

2012 - In preparation for BCMA implementation:
- MAAP team ensured the 6 processes for safe medication administration were incorporated into BCMA training & workflows
- Every nurse demonstrated competency in BCMA simulation training and is held accountable for complying with the process

Promoting a Culture of Safety

Established a shared **vision** that all patients will be administered medications in the exact same way, every time. And that patients will be engaged in their own care.

A **strategy for change** and improvement was established allocating financial, personnel, educational, and time resources to the development of the BCMA simulation training process.

Focused on process, workflows and systems and **minimized individual blame**.

Significance:

Many serious medication errors are preventable and threaten patient safety & quality of care.
- Med admin accuracy is a "core of quality" measure yet is often not utilized as a performance improvement tool.
- Administering medications accurately is achieved by standardizing the administration process.

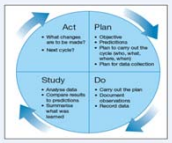
Engaging direct-care nurses in measuring their own data is crucial to creating a culture of safety.
The role that front-line nurses play in direct patient care:
- Places them in a unique position to prevent medication administration errors.
- Gives them the insight necessary to drive significant change at the unit level.

Direct observation of the medication administration process provides an additional perspective on errors.
- Utilizing a 3-pronged approach allows for a more complete picture of medication errors: review incidents reports, BCMA compliance rates and observational data.

Strategy & Implementation

Direct Observation Methodology

Nurses trained in direct observation methodology performed observations of nursing medication administration passes and documented adherence to the standardized processes.
- 100 dose observations on each unit (12 adult inpatient units)
- 1200 total doses observed annually
- Each unit nominates direct-care nurses as Unit Team Leads (UTLs)
- Nurses use observation data to identify opportunities to improve process reliability and perform monthly rapid improvement cycles, implementing changes on their units.
- Unit Team Leads facilitate improvement strategies based on:
  1. Medication administration observation data that they collect
  2. Utilization of the **PDSA model of improvement** to facilitate improvement strategies

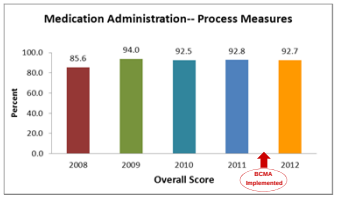


Evaluation & Implications for Practice

- Standardizing the medication administration process ensures the "5 Rights" are achieved, and ultimately decreases errors.
- Front-line nurses are essential in identifying opportunities for improvement on their units, as well as establishing and sustaining best practices.
- Repeated observation studies, improve outcomes over time.
- Incorporating the 6 processes for safe med administration into BCMA training and practice is essential for compliance.
- Collaboration between nursing and pharmacy results in more complete and accurate assessments of the scope of nursing medication administration errors.

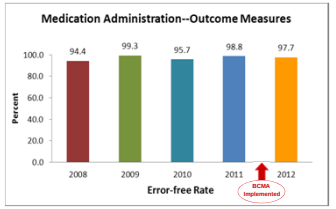
Results

Compliance with Six Safe Processes



Process Measures	2008	2009	2010	2011	2012
Aggregate Total*	85.6	94	92.5	92.8	92.7
Compares medication with MAR	96.7	97.4	97.9	99.8	93.9
Not distracted/not interrupted	61.6	79.3	78.3	73.7	79.9
Medication labeled from preparation to administration	97.5	99.8	98.7	99.6	99.2
Checks 2 forms of ID	84.6	95.6	92.4	90.8	93.2
Explains medication to patient (as appropriate)	85.5	96.5	94.8	96.3	96.5
Charted medication immediately after administration	87.6	95.3	92.6	96.8	93.3

Errors in Medication Administration



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For additional information please contact:
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