

Implementation of a Standardized Double Check Process

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IDENTIFICATION:

UMMC requires that two licensed health care professionals perform a double check prior to administering high alert medications including: insulin infusions, Patient Controlled Analgesia (PCA) and epidurals, chemotherapy and biotherapy (all routes of administration), heparin infusions, and total parenteral nutrition (TPN) infusions.

Despite having the double check policy, medication events continued to occur. Upon investigation of these events, it was determined that there were several inconsistencies in how staff were completing the double check. There was no defined process included in our policy on how to complete an independent double check.

PROCESS:

The Medication Error Adverse Drug Event (MEADE) Advisory Council decided to standardize the independent double check process to prevent medication errors with high alert medications.

Research was done to look for a best practice or protocol for a standard double check process, but there was very little that has been published on this topic.

The members of the multi-professional MEADE Council met over several months to define the elements of a best practice for a standardized independent double check process. Several nurses reviewed the process and used it on their units to test it operationally. The process was taken to other hospital committees for input and feedback. These committees included: Clinical Practice Council, the Pain Committee, Staff Nurse Council, Nurse Coordinating Council, the Pharmacy and Therapeutics Committee, and the Performance Improvement Steering Committee.

SOLUTION:

For all medications requiring double-checks, the following procedure applies.

Goal: Prior to medication administration, two licensed healthcare professionals independently go through the steps in the double-check procedure below and arrive at the same conclusion.



When: Independent double-checks must be performed **before** the start of the infusion and **before** administration of the medication.

Procedure:

- Identify the Patient (Name & Date of Birth) – using the patient ID band and having the patient and/or family participate when possible.
- Review allergies and sensitivities.
- Compare the medication order to the medication label to verify correct:
 - Patient name;
 - Drug name;
 - Dose (weight based dosing when applicable);
 - Frequency;
 - Route; and
 - Time of administration.
- Ensure the pharmacy label matches the manufacturer label (if appropriate).
- Review expiration date of medication.
- Perform any necessary calculations.
- Review medication protocol when or if applicable (such as a heparin nomogram or TPN Power Form).
- Check most recent relevant lab values.
- Program IV Pump and review settings. Confirm rate.
- Re-identify patient (Name & Date of Birth) immediately prior to administration.
- Document Double-Check (see below).

| Medication | When to Double-Check | Where to Document Double-Check |
|--|--|---------------------------------------|
| Insulin infusions | start of infusion and bag changes | Power Chart |
| PCA/Epidural | initial set-up, reprogramming of pump, and bag changes | Pain Management Flowsheet |
| Chemotherapy and Biotherapy (all routes of administration) | before administration | Chemotherapy Checklist |
| Heparin infusions | start of infusion and bag changes | Power Chart |
| TPN | start of infusion | Power Chart |

This process was educated to the nursing staff at various nursing meetings. The process was added to our Medication Management Policy as an attachment. The standardized independent double check process is now part of our annual nursing competency marathon. At this time, all nurses demonstrate their knowledge of the process for completing a double check. We have a



forcing function in our electronic medical record that forces the nurse to obtain a witness prior to documenting medication administration and bag changes.

OUTCOMES:

This standardized independent double-check process was implemented in December 2009. We have not had much time to collect data. However, since implementation, there has been a significant decrease in the amount of medication events that have been reported for medications that require a double check.