Improving the Safety of High Concentration PCAs
LifeBridge Health

Program/Project Description.
Eliminating the potential for a patient to receive an overdose of a narcotic medication. The problem was identified when a medication error occurred. A total of 7 patients received High Concentration PCAs from January 2010 thru July 2010. Of the 7 patients, 1 patient experienced an adverse event. To improve the process for ordering, dispensing, and administering High Concentration PCA's. We will continue to monitor all patients receiving high concentration PCA’s and make sure they meet the criteria and that the PCA has been safely ordered, dispensed, and administered according to the proper procedures. Our goal is to have zero adverse events.

Process.
RCA

Solution.
Please see attached Action Plan

Measurable Outcomes.
We have just begun implementation and do not have data at this time.

Sustainability.
We are monitoring and reviewing each patient who receives a High Concentration PCA to make sure all steps in the process are executed properly. Th

Role of Collaboration and Leadership.
Teamwork played a large role. Physicians, Administration, Pharmacy, Nursing, Risk Management were involved in the process. Leadership was engaged in the process and shared the vision for success. Leadership participated in the initial meetings for the RCA and were present during the final presentation of the new process.

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# High Concentration PCA Action Plan

**Purpose:** To improve the process for ordering, dispensing, and administering High Concentration PCA's.

## Results/Accomplishments:

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| **Step 1:** Change PCA Order to read as "High Concentration" instead of "High Dose." | Jeff | Complete June 16, 2010 | A. Pharmacy  
B. IS | A. None | Nurse and Provider Education  
Care Connect |
| **Step 2:** Investigate the ability to fire the alert to the provider when the CareSet is signed instead of when the CareSet is opened.  
-Modify wording of the alert to make it clearer to the prescriber regarding dosing requirements. | Jeff and Lisa | Complete June 2010 | A. Pharmacy  
B. IS  
C. ERC | A. System Hard Coded | Nurse and Provider Education  
Care Connect |
| **Step 3:** Identify a Large Red Sticker "RED PUMP REQUIRED" that can be placed on the syringe barrel and plunger. | Lisa | Complete July 1, 2010 | A. Pharmacy  
B. ERC | A. None | Pharmacist Education,  
Nurse Education |
| **Step 4:** Modify how the Pharmnet label is attached to the syringe to make it more visible to the nurse. Need to assess safety. | Lisa, Mary, and Susan | Pending | A. Pharmacy  
B. Nursing | A. Capability of System  
B. | Nurse Education |
| **Step 5:** Establish a standardized procedure for the nurse independent double check. The RN would also need to unlock the pump to | Susan and Kimmith | August 2010 | A. Nursing  
B. ERC | | Nurse Education |
verify the 5 rights each morning.  
Identify a mechanism to remind the nurse electronically to complete the independent double check.  
Policy will need to be reviewed.  
Education needs to be completed.

| Step 6. Evaluate the PCA Powerform to identify a way for the nurse to document the concentration of the PCA. Change Current form to read Concentration instead of High Dose. | Susan and Kimmith | August 2010 | A. Nursing  
B. IS | Nurse Education |
|---|---|---|---|---|

| Step 7: Identify a process to send the Red Pump with the first High Concentration PCA syringe. Pharmacy will call Clinical Engineering and request a Red Pump to be sent to the patient's room. | Lisa | Complete July 1, 2010 | A. Pharmacy  
B. Clinical Engineering  
C. Nursing  
D. ERC | A. None  
Pharmacy, Clinical Engineering, Nurse Education |
|---|---|---|---|---|

| Step 8: Build an alert that fires in Pharmnet to alert the pharmacist of the requirements for a High Concentration PCA. | Lisa and Mary | Complete July 12, 2010 | A. Pharmacy | A. None  
Pharmacist Education |
|---|---|---|---|---|

| Step 9: Place (RED PUMP) next to the orderable on the EMAR so it is visible to the nurse without hovering. | Lisa | Complete June 16, 2010 | A. Pharmacy  
B. ERC  
C. IS | A. None  
Nurse Education |
|---|---|---|---|---|

Evidence Of Success

Evaluation Process