CLINICAL PROCEDURE
Medications: High Alert: Double Check Procedure

A. EFFECTIVE DATE:
April 6, 2020

B. PURPOSE:
To define the procedure for performance of double checks for high alert medications, removal of fentanyl patches and other required circumstances.

C. POLICY:
1. The Pharmacy and Therapeutics Committee determines those medications that will be classified as “high alert” and which require a double check.
2. A practitioner or pharmacist may perform a medication double check in the event that a second RN is unavailable. The person performing the double check must have access to the electronic MAR.
3. A medication double check must be performed upon initiating an infusion, with subsequent bag or syringe changes, as well as with any dose or rate changes.
   a. Oxytocin infusion is an approved exception to this policy, per Pharmacy and Therapeutics Committee. Oxytocin infusions do not require double checks for every rate change.
4. The following safety precautions for concentrated sodium chloride 23.4% will be implemented for patients with refractory intracranial hypertension or suspected increased intracranial pressure:
   a. available only through order sets accessible in ICU and ED
   b. product labeled as a high alert medication
   c. witness is required upon removal from the automated dispensing cabinet; notification of high alert status will occur and will not be available for override
   d. requires double check at the time of administration
   e. Must be administered through central line
   f. Must be administered by a practitioner (MD/LIP)
5. All high alert medications, administered by continuous infusion must be administered with IV pumps utilizing the drug library.
   Exceptions are those medications administered with medication- specific infusion devices without drug libraries. These infusions require that 2 RNs double check the rate of delivery.
6. For all high alert medication delivered by continuous infusion, the medication double check must be performed in the presence of the patient.
7. When Pharmacy dispenses insulin in syringes, pharmacy completes a double check of the correct vial that remains in pharmacy. Independent double checks by nursing of prefilled insulin syringes provided by pharmacy are to be performed as follows:
   a. for syringes with bar coding other than U-500 insulin, a double check of the syringe is not required
   b. for syringes without bar coding, a double check of the syringe and label is required to verify correct patient, correct medication, and correct dose
   c. for U-500 syringes, a double check is required to verify correct patient, correct medication, and correct dose.
8. A double check is not required for insulin mixed within parenteral nutrition formulation. The RN hanging the infusion must verify that the amount of insulin matches the order

D. SCOPE:
All clinical areas in which medications are administered.

E. DEFINITIONS:
A Medication Double Check includes verification of the following:
   • Medication Administration Record (eMAR) for the correct medications and patient
   • Correct route of medication
   • Correct dose in the syringe or infusion bag
   • Correct concentration of medication in the infusion
   • Independent calculation of the dose and rate of infusion
   • Correct guardrail is being used
   • Infusion dose and rate are correctly set on the infusion pump
   • Correct infusion pump channel: verified by physically tracing the line from the solution through the pump channel and to the patient’s insertion site

F. MATERIAL(S) NEEDED:
None

G. PROCEDURE:
Double Check for an Individual Medication Dose
1. Two licensed persons will check the eMAR against the medication order.
2. Both licensed persons will verify that the correct medication is selected by comparing either the medication container or, in the event of a Multi-Dose vial, the attached barcode label, with the eMAR.
3. Each licensed person will independently calculate the medication dose to be administered. The calculations must be:
   a. done alone and apart from one another;
   b. done without influencing one another – avoiding statements such as “please check that I have drawn up 25 units of regular Insulin”;
   c. followed by comparing results for each step of the process.
4. The second person validates that the dose to be administered is correct.
5. The double check is documented in the medical record.

Double Check for Initiation of Continuous Infusions CIs)
1. Two licensed persons will check the Medication Administration Record (eMAR) against the order.
2. Both licensed persons will verify that the correct medication is selected by comparing the medication label with the eMAR.
a. If more than one concentration / strength is available the double check will include validation of the correct concentration.

b. If the medication is labeled for an individual patient, the patient label will be checked against the patient’s wristband by scanning.

3. Each licensed person will independently calculate the rate at which the medication is to be infused to deliver the ordered dose. The calculation must be:
   a. done alone and apart from one another;
   b. done without influencing one another – avoiding leading statements such as “please check that the rate is 4 ml per hour to deliver 4 units of regular Insulin”.

4. The second licensed individual checks the pump to verify that the infusion rate is set correctly.

5. Both licensed individuals will verify that the correct pump channel is being used by physically tracing the line from the solution, through the pump, and to the patient’s insertion site.

6. The double check is documented in the medical record.

**Double Check for Removal and Disposal of Fentanyl Patches, the RN will:**

1. Verify the order for Fentanyl patch removal.
2. Remove the patch and fold it upon itself. Wash the residual Fentanyl off the skin by cleansing with warm water
3. With a second RN or pharmacist as witness, discard the used patch in a hospital-approved disposal container.
5. Document the witnessed waste in Pyxis with second RN or pharmacist.
6. Document patient education regarding proper application and disposal of Fentanyl patches. Supplement patient education as needed using UConn Health-approved educational resources.

**Incorporating High Reliability Principles into the Double Check Process, the RN will practice:**

1. Attention to Detail by avoiding “auto-processing” when double checking the work of others (habitual manner, little real appraisal) and by minimizing distractions and interruptions to the extent possible.
2. Practice and Accept a Questioning Attitude by looking for and processing additional information once the initial information looks correct.
3. Critical Thinking by guarding against a false sense of security associated with relying on someone else to catch mistakes during the double check process.
4. Validate and Verify by not being overly confident in the work of the person soliciting the double check.
5. Speak Up for Safety by failing to ask questions when sensing a possible error because the other person involved in the double check process has more authority or presses to move forward prematurely.

**H. ATTACHMENTS:**
Medication Administration [http://nursing.uchc.edu/hosp_admin_manual/docs/08-052.pdf](http://nursing.uchc.edu/hosp_admin_manual/docs/08-052.pdf)

**I. REFERENCES:**
1. ISMP. Independent Double Checks: Undervalued and Misused: Selective Use of This Strategy Can Plan an Important Role in Medication Safety.

**J. SEARCH WORDS:**
Medication, high alert, double check, fentanyl patch, insulin
K. ENFORCEMENT:
Violations of this policy or associated procedures may result in appropriate disciplinary measures in accordance with University By-Laws, General Rules of Conduct for All University Employees, applicable collective bargaining agreements, the University of Connecticut Student Code, other applicable University Policies, or as outlined in any procedures document related to this policy.

L. STAKEHOLDER APPROVALS:
On file

M. COMMITTEE APPROVALS:
Nursing Standards Committee

N. FINAL APPROVAL:

1. Andrew Agwunobi, MD, MBA (Signed) 4/16/2020
   Andrew Agwunobi, MD, MBA
   UConn Health Chief Executive Officer

2. Anne D. Horbtauck, RN, BSN, MBA (Signed) 4/21/2020
   Anne D. Horbtauck, RN, BSN, MBA
   Clinical Policy Committee Co-Chair

3. Scott Allen, MD (Signed) 4/17/2020
   Scott Allen, MD
   Clinical Policy Committee Co-Chair

4. Caryl Ryan, MS, RN (Signed) 4/16/2020
   Caryl Ryan, MS, RN
   VP Quality and Patient Service & Chief Nursing Officer

O. REVISION HISTORY:
Replaces: Medications: High Alert, Double Check of
Approved: 07/05/2019
Revised: 4/2020