

2019 Safe Medication Management Practices

All medications being dispensed by students must first be reviewed and approved for administration by the on-site faculty or a Beaumont Health staff nurse acting as a mentor or preceptor for the student.

Faculty or the staff mentor/preceptor must observe undergraduate students every time medications are administered to any patient.

Licensed nursing personnel must cosign for every medication administered by a student.

Medication Administration:

The "Right Time" for the medication administration.

Some medications are considered time-critical scheduled medications for which an early or late administration of greater than thirty minutes might cause harm or have significant, negative impact on the intended therapeutic or pharmacological effect. Time-critical scheduled medications which must be administered within thirty minutes before or after their scheduled dosing time may include, but are not limited to:

Antibiotics, Anticoagulants, Insulin, Anticonvulsants, Immunosuppressive agents, Pain medication, Medications prescribed for administration within a specified period of time, Medications that must be administered apart from other medications for optimal therapeutic effect or medications prescribed more frequently than every 4 hours.

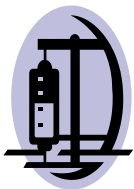
1. Selecting your patient:
 - a. From My Patient lists by double clicking then access MAR from the tabs on the left side of patient's chart then click **Due Meds on the toolbar**. Each med that is due will appear under the time column in a gray box with time and Due.
 - b. You can also access medications that are due from the Work List.
2. Give a medication
 - a. After you have logged into EPIC and opened the patient's MAR, scan the square barcode on the patient's wrist band. A green checkmark will appear stating Patient Scanned.
 - b. Each hour is denoted in black column header
 - c. Scan the barcode of the med you want to administer.
 - If dose has multiple components must scan each component
 - If patient has multiple meds due at the same time scan them now. **Do all oral meds before IV/IVPB meds.**
 - If you cannot scan the barcode. In the warning window, select the correct override reason and click ACCEPT.
 - d. Verify the action and doses are correct for all meds.
 - e. Administer all medication **before** Clicking **Accept**.
 - On the MAR, the med's administration time and action appears in a green box.
 - f. Document additional information while giving a medication
 - Document patient pain score on flow sheet while giving pain medication.

- Ask patient pain level and document within the MAR.
- Click Accept when complete.
- g. Medication dispensed in excess of the dose
 - Scan the patient's wrist band and then the medication.
 - In the Warning Window, click **Partial package**.
 - Enter a dose, fill out details required, and then click **Accept**.
- h. To correct an administration where you have made a mistake while documenting:
 - Click the administration hyperlink for the med that was incorrectly documented. (Shows time and dose given)
 - Click box to Edit Administration (bottom left side screen).
 - Make your changes and click **Accept**.
- i. Missed, Held and Overdue Meds
 - On MAR select Due/Overdue Meds tab to see only meds due during the current shift.
 - If a medication was not administered click the scheduled due time for the med. In the warning window, give the med an action of not given and click **Accept**. In the reason field indicate why medication was not given. If you do not see an appropriate answer select **Other** and enter a note in the comment section. Click **Accept**.

NOTE: If you have not administered a medication within 60 minutes of its scheduled time, you must document it as Not Given!

IV Guidelines:

1. All IV's and IVPB's are to be scanned so that correct volumes can be documented in the I&O section of the FlowSheet. The pump must be turned on but stopped. Scan the IV/IVPB bag then scan barcode for A if primary line or B for secondary line. Click on **send information to pump** and wait for information to transmit to pump and once medication and rate appear press Start then will automatically document in MAR. (Several medications that used to be IVPB are now in syringes that connect to the tubing in the pump. They have a barcode to scan but the pump must be manually programmed).
2. IV and IVPB tubing
 - a. Change every 7 days with the exception of TPN, lipids, Propofol and blood products. Tubing that is visibly soiled or contaminated (has touched the floor) must be changed at once.
 - b. Once IVPB tubing is removed from the primary line, it must have a sterile cap and label applied and is good for 24 hours.
 - c. Back-priming is preferred to reduce the need for disconnecting tubing.
 - d. When new tubing is hung, affix a label with date, time, and initials.
3. IV devices
 - a. Should be evaluated at the beginning of each shift to ensure accuracy of programming: correct drug, correct rate and correct volume.
 - b. Should continue to be evaluated at least every 8 hours for cannula-related complications.
4. Continuous IV solutions
 - a. Always check expiration date and integrity prior to use.
 - b. When using floor stock IV solutions, affix a patient ID sticker and a label with the drug name, strength or amount, infusion rate, date and time hung, and your initials.
 - c. Shall be discarded within 72 hours of hanging with the exception of TPN, lipids, Propofol and blood/blood products.



5. Dressing changes
 - a. Change IV site dressings every 7 days or sooner if damp, loose, or soiled.
 - b. Transparent semi-permeable membrane (TSM) dressings are recommended.
6. IVP medications
 - a. **Nursing students are not permitted to administer IVP medications** with the exception of maintaining peripheral IV access catheters with saline or heparinized saline as ordered.
7. Whenever an IV line is removed it is documented in the Flowsheet section under IV Assessment. Click the blue print to the right of the IV Properties header then document the lines removal and click **Edit**. Enter removal date, time, reason and assessment then Click **Accept**.
8. We now use DualCaps for ALL patients with central lines. If a patient has a central line (IJ, chest port, Hickman for hemodialysis or PICC), all access ports not connected to an IV **MUST** have a light blue DualCap. All IV & IVPB tubing used for central lines **MUST** have a dark blue DualCap when disconnected. All Y-ports **MUST** have a light blue DualCap. If a patient with a central line also has a peripheral line DualCaps **MUST** also be used for all IV sites and lines.

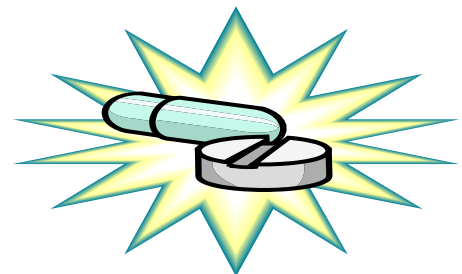
Patient Identification

To accurately identify a patient before administering care, medications, blood products, or prior to providing treatments, procedures, diagnostic testing, blood sampling or the collection of any specimens for clinical testing, all caregivers will compare identifying information from the medical record, informed consent, profile card, MAR or requisitions with that on the patient's ID wristband. Information to compare will include the following:

1. For patient care and medications:
 - a. Patient's first and last name and date of birth
 - b. Barcode on patient's ID bracelet.
2. On the Obstetric Unit (Only OB unit that hosts nursing students):
 - a. To identify Mom, use patient's first and last name, medical record# and date of birth.
 - b. To identify baby, scan the ID bracelet to ensure that baby's correct info appears on the computer screen.
 - c. The ID band numbers of the Mom and baby need to match as well on another person of the mothers choosing prior to turning the child over to them.
 - d. The HUGS system is also used for infant care. This is an additional band that is used for tracking of the child to prevent kidnapping and will alarm if the child is taken too close to an exit door.

Securing Medications

All medications must be secured and locked when not in use. Never leave medications unattended; never leave any medication at the patient's bedside. If medication is found at the bedside such as inhalers, ointments, creams, etc., return them to the nurse.



Bedside, Self-Administered, and Home Medications

1. Bedside Medications
 - a. Medications, including those from home, may not be kept at the bedside.
 - b. Personal items (dermoplast, tucks) can be stored in the patient's bathroom.
2. Self-Administered Medications
 - a. Self-administering medication is not allowed.
3. Home Medications
 - a. Medications must be:
 - i. Sent home with caregiver/family whenever possible.
 - ii. When they cannot be sent home, medications must be sent to the pharmacy for storage.
 - b. Dispensing Home Medications
 - i. If home medications will be used during the patient's hospital stay the following must occur:
 1. A physician order must be entered into the computer.
 2. The medication bottle must be clearly and properly labeled.
 3. The medication must be forwarded to the pharmacy for positive identification.
 4. The medication must be kept in the patient's bin in Pyxis.
 5. All doses will be administered by nursing and documented on the MAR.

Note: These home medications **MAY NOT** be left at the bedside or self-administered.

High-Risk/High-Alert Medications

High risk, high alert medications are those with a high percentage of error, sentinel events, or those that carry a high risk for abuse, error, or other adverse reaction. Multiple practices have been put into place to safe guard their use including:

Independent Double Check: An independent double check system requires two clinicians to separately check the components of the work process. The administering clinician and another separate clinician each check the order, laboratory study (where applicable), dose calculation, infusion pump settings and correct line attachments (where applicable) to verify the medication prior to the actual administration. This is documented in the computer.

High risk/high alert medications that require an independent double check include:

1. Insulin (subcutaneous, intravenous infusion)
2. Opiates/Narcotics, including:
 - a. Morphine (PCA, continuous drip)
 - b. Fentanyl (PCA)
 - c. Meperidine (Demerol) (PCA, continuous drip)
 - d. Hydromorphone (Dilaudid) (PCA, continuous drip)
3. Heparin (Intravenous infusion)
4. Thrombolytics, including:
 - a. Tenecteplase (TNK)
 - b. Alteplase (rTPA)
5. Concentrated Electrolytes, including:
 - a. injectable potassium chloride 2 meq per ml or greater
 - b. injectable potassium phosphate 3 mM per ml or greater

- c. injectable magnesium sulfate 50% or greater
- d. injectable sodium chloride greater than 0.9%
- 6. Epidurals
- 7. Chemotherapeutic agents
- 8. Sodium Chloride >0.9%

The independent double check is required at dose preparation time, initial pump set-up or changes to dosage/rate and change in caregiver. Verify pump settings and correct line attachments where applicable.

Co-Signature is the documentation whereby both clinicians who perform the independent double check use their personal identification and password to document the completion of the independent double check in the electronic medical record. This is required for all meds listed above except sub-q insulin.

Brightly colored alert labels: will be affixed to every High-Alert medication by Pharmacy.

Look-alike/Sound-alike Medications:

Each Beaumont Health site has identified at least 10 sets of look-alike, sound-alike medications that can potentially create medication errors. The lists for each site can be found on the web page in your orientation folder. These medications will also have "TaLL" lettering on the EMAR.

Narcotics

Any unused portion of a narcotic must be wasted in special bins for narcotics called CsRx containers near the PYXIS machines in the presence of an authorized witness, and co-signed through the automated dispensing machine or on the narcotic log depending on the area.



Blanket Order Policy

Blanket orders are general directions that do not provide specific information about the drug therapy prescribed.

1. Examples include:
 - a. "Continue previous meds"
 - b. "Discharge on current medications"
 - c. "Resume pre-op orders"
2. All drug orders must include drug name, dose, strength or concentration, form, route, and frequency.
- 3. Blanket orders are prohibited.**

Range Orders

1. When drug orders contain a dose or frequency range utilize:
 - a. The lowest dosage for initial dose. If effective, continue with this dose when med is requested. If not effective, can move to higher ordered dosage next time medication is given.
 - b. For pain medication, if ordered for a specific pain scale range only that med may be administered. For example, only the pain medicine specified based on the pain level the patient reports can be administered such as for mild pain 0-3 Tylenol 650mg q 4hrs prn, for moderate pain 4-7 Vicoden 2 tabs q 6 hrs prn and severe pain morphine 4 mg IVP q 6 hrs prn.

- c. The shortest frequency. Pharmacy will automatically convert frequency to the shortest time ordered.
2. Double range orders are unacceptable: a range in both dose and frequency.

PRN Medications

1. Orders for PRN medications must include the reason/circumstance for which it is intended and given for only that reason:
 - a. PRN for fever greater than 101° F
 - b. PRN for SBP greater than 180
 - c. PRN for nausea and vomiting
2. When PRN medications are administered document:
 - a. The actual time given on the MAR.
 - b. The dose given if range order applies.
 - c. For all PRN medications, the reason why the medication is being given must be documented in the Comment box on the right side of the MAR.
 - d. The reassessment findings after administration of pain medication are documented in the electronic record within **1 hour** of administration.

Multi-dose Vials and Bottles

~These include injection vials such as insulin and heparin, solutions like Milk-of-Magnesia and betadine, and supplies used for irrigation including sterile water, sterile saline and syringes.



~Opened multi-dose vials will be discarded when opened with the following exceptions:

- Insulin (Lantus)- 28 days room temperature-unopened/opened
- Purified protein derivatives (Tuberculin)- 28 days refrigerated-opened
- Succinylcholine (Anectine) – 14 days room temperature-unopened/opened
- Rocuronium bromide (Zemuron)- 60 days room temperature-unopened, 28 days room temperature-opened
- Lorazepam (Ativan) – 60 days room temperature- unopened, discard immediately after opening

Note: Pharmacy will date all of the above products before dispensing to the patient care areas.

~Sterile Saline and Sterile Water Pour bottles shall be discarded within 24 hours after opening. Open bottles must be timed and dated with the expiration date (beyond use date) **NOT** the date opened.

Bedside Glucose Testing

1. All of our facilities use the Nova StatStrip Glucose Monitoring System for bedside glucose testing.
2. Point of Care Testing (including bedside glucose testing) is **definitive**. This means that we use the results from point of care testing to treat the patient.
3. The glucometer is cleaned **between every patient** with Sani-cloth wipes (purple top) and **must** be continuously wiped for 2 minutes.
4. Barcodes
 - a. Faculty may contact an Educator at their clinical site for initial instruction, demonstration, and competency testing. After completing the initial competency the faculty person will receive a barcode in approximately 2 weeks.
 - b. This barcode will only function at Beaumont Health sites where you are assigned.
 - c. Yearly competency is required in order to maintain "Valid Operator" status for the glucose monitor. Competency includes:
 - i. Passing the glucose monitor written test with a score of 90% or higher

- ii. Performing the Quality Control Test High and Low controls on the glucose monitor and 1 Patient Test **once every six months.**
 - d. It is a regulatory requirement that every test performed on the glucose monitor can be traced back to the exact person who performed the test. Therefore, it is not acceptable for staff to share their operator ID number (barcode) with others.
 - e. Because students are functioning under the faculty's license they will not be issued individual barcodes, but **MUST** use the operator ID issued to their instructor.
5. Insulin is now provided in 3ml vials for single patient use and will be in the patient specific bin in the bulk tower of the PYXIS machine as they do not need to be refrigerated and are returned to the bin after use. The only insulin in the refrigerator will be Lantus that only comes in the standard size vial.

Please refer to the on line electronic policies and procedures for additional information on safe medication administration.

10 RIGHTS OF MEDICATION ADMINISTRATION

1. Right Medication
2. Right Dose
3. Right Time
4. Right Route
5. Right Patient
6. Right Patient Education
7. Right Documentation
8. Right to Refuse
9. Right Assessment
10. Right Evaluation