Department of Pharmacy

Medication Administration – Administering and Charting Medications to Patients  (N 11-10)

Intent:

For a medication regimen to be most effective, medications must be administered appropriately. Medications are administered pursuant to a prescriber’s order; to the patient for whom they were ordered; by the route ordered; and at times appropriate to the dosage frequency. All medication administration is documented in the patient’s medical record.

Policy:

All medications are to be administered to the patient by a staff person who has the authorization to do so (see Pharmacy Policy VII-I, Who May Administer Medications) unless a prescriber’s order allows the patient to perform self-administration of medications with supervision (see Pharmacy Policy VII-G, Self-Administration of Medication by Patient).

General Procedures for Administering Medications

1. The nurse will identify the patient using two patient specific identifiers by checking the Medication Administration Record (MAR) with the patient’s identification wristband before administering any medications. Examples of acceptable patient specific identifiers include patient wrist band with name, patient specific number (billing or medical record), date of birth, Social Security number. The patient room number is not an acceptable identifier. The nurse will scan the patient’s wristband to access the patient’s med profile within MAKK.

2. The nurse will read each entry in the patient’s medication administration record and select the appropriate medication from the patient’s medication drawer. The name of the medication, the dosage strength, the route of administration, and the dosage schedule are verified before administering the medication. If nursing personnel have any doubt about the medication name, strength, route of administration, allergy, or contraindication, the prescriber and/or pharmacist will be contacted before administering the medication. For eMAR charting, the medication is verified by “clicking” on the appropriate medication to be administered and then scanning the corresponding barcode to visualize the green checkmark on the eMAR screen to proceed. Pharmacy will be notified at all times if the nurse verifies medication name, strength, and dosage form and still receives a “mismatch message”; the barcode will not be overridden.”All IV admixture medications should be visually examined for particulates or discoloration and to ensure that the medication has not expired.

3. For non-eMAR charting the “Read Label Three Times” rule represents a safety check and is incorporated into each medication administration activity. The medication labels are read and verified as follows:
   a. When the medication is selected from the patient’s medication drawer (review for correct drug, dose, etc.).
   b. Before administering the medication to the patient (look at the patient’s identification wristband, compare to the Medication Administration Record (MAR), and the medication...
held in hand).

c. As the dose is recorded on the patient’s MAR, compare the empty medication package with the MAR.

4. The prescriber will be notified when administration of scheduled medication doses is prevented by changes in a patient’s status, level of cooperation, or response to a medication. Examples are: inability to take oral medications due to nausea and/or vomiting; patient refusal to take medications; failure of an analgesic regimen to relieve discomfort.

5. Medication administration charting may not be done ahead of the medication administration round. For non-eMAR medications are charted in the MAR as the medications are administered. For eMAR charting, upon completion of scanning all the medications’ barcodes then scanning the corresponding patient’s bracelet, the medications are administered. Upon completion the meds are then “charted.” Medications that are not administered as ordered are noted on the MAR with an explanation (patient nauseated, patient in physical therapy – dose delayed, etc.). For eMAR charting, “non-administered” for that particular dose ONLY if that dose will never be administered in that particular shift. If on order to discontinue a medication is written outside of pharmacy hours, the nurse will chart “non-administered” for all administration times for that medication up through 9 AM the next morning when pharmacy is here to process the order.

6. High risk medications (i.e. insulin, Lovenox®, etc.) require a second nurse witness; these medications have a “blue pen” to the right of the medication within MAK.

7. Some medications require assessment and verification of patient condition prior to, or as a result of dosing. When such a situation exists, the results of the assessment and verification will be noted on the MAR at the time of medication administration. Observations may also be noted in the Nurses Progress Notes. Special emphasis should be placed on monitoring for the desired effect and potential side effects when a patient receives a medication for the first time.

Examples of this situation are:

a. Assessment of heart rate prior to giving digoxin and holding dose, if prescriber’s criteria are met.
b. Determining blood glucose levels to decide the appropriate sliding scale insulin dose.
c. Determining blood pressure prior to and after administering a PRN antihypertensive medication.
d. The need for and effect of PRN antipyretic agents on body temperature.
e. Pain scale status, as scored by the patient, before and after administration of an analgesic.
f. Respiratory status, blood pressure, oxygenation, carbon dioxide levels, degree of sedation for opioids.
g. Current INR (within the past 24 hours) prior to warfarin administration.

8. Medications prescribed for one patient are not to be administered to another patient, regardless of circumstances. “Borrowing” of medications from one patient for another is prohibited because to do so bypasses the checks and balances of the medication distribution process; often results in inappropriate charges being assessed to both patients; and may result in “missing” medications later in the day. If a medication is unavailable in the patient’s medication drawer, the medication shall be obtained from the pharmacy, from floorstock, from a Pyxis unit, or from the night
cabinet, depending upon the situation.

9. Nursing should advise the patient or, if appropriate, the patient’s family about any potentially clinically significant side effects or adverse reactions or other concern prior to administering any new medication for the first time. The patient, patient’s family or representative are educated about notifying nursing staff promptly when there is a difficulty breathing, or other changes that might be a reaction to medication. When unexpected and unwanted effects of medications are observed by nurses or any other health care professional, they will document the observed medication effect in RxMediTrend and report the reaction to the prescriber (Pharmacy Policy XIV, Monitoring and Evaluation- Adverse Drug Reaction Reporting Program.)

10. To ensure continuity of care/safe medication administration, it is essential to communicate all relevant information regarding patients’ medication risk factors and monitoring requirements when handing off the patient to other clinical staff, such as when patients are transferred internally from one unit to another, during shift report at change of shift, etc. This would apply to hand-offs involving not only nursing staff but also other types of staff who administer medications, e.g., respiratory therapists.

Timing of Medication Administration
1. The timing of medication administration takes into account the nature of the prescribed medication, specific clinical applications, and patient needs. Medications will be classified as not eligible for scheduled dosing times or eligible for scheduled dosing times. Those that are considered eligible for scheduled dosing times are further classified as time-critical and non-time-critical.

2. Medications considered not eligible for scheduled dosing times require exact or precise timing of administration. Examples may include stat doses, first time or loading doses, one-time doses, doses specifically timed for procedures, time-sequenced doses, doses timed for serum drug levels, investigational drugs, or drugs prescribed on an as needed basis (PRN doses).

3. Time-critical scheduled medications must be given within 30 minutes before or after their scheduled dosing times. Examples may include 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. Time-critical scheduled medications must be designated as such on the MAR to facilitate timely administration.

4. Non-time-critical scheduled medications prescribed more frequently than daily, but no more frequently than every four (4) hours, must be given within one (1) hour before or after their scheduled dosing times. Non-time-critical scheduled medications prescribed daily or less frequently (weekly, monthly, etc.) must be given within two (2) hours before or after their scheduled dosing times.

5. See Appendix A for Timing of Medication Administration Template for an overview of timing of med classes.

Evaluation of Medication Administration Timing Policies
Periodic evaluation of the medication administration policies including staff adherence to the policies will be done to determine whether the policies assure safe and effective medication
administration. Medication errors related to the timing of medication administration must be tracked and analyzed to determine their causes. Based on the results of evaluating the policies and the medication administration errors, the medical staff must consider whether there is a need to revise the policies and procedures.

**Documentation in the Patient’s Medical Record**

1. The nurse administering medications must sign his/her full name and initials on the MAR in the allotted space for identification of staff passing medications for each time period. The nurse’s initials may then be used to chart each individual dose of medication administered. For eMAR charting this requirement is satisfied by scanning of the nurse’s unique badge barcode.

2. Scheduled medications that are not administered at the proper time or are missed should be circled or otherwise identified. When a dose is delayed or omitted due to patient factors such as nausea, patient refusal, patient away from floor for radiology or physical therapy, etc., the conditions that contributed to the delay or omission are noted on the MAR For eMAR charting, “non-administered” for that particular dose ONLY if that dose will never be administered in that particular shift. If during the next shift, a non-administered dose may be charted as given by clicking on the “charted list” Click on the appropriate non-administered dose and scan the medications barcode, scan the patient’s bracelet, administer the dose, and click “chart.”.

3. Medications ordered on an “as needed” or PRN basis will be charted in the section of the MAR designated for PRN Medications. The times at which they were administered, and factors contributing to their administration, if appropriate, are also documented. For eMAR charting, many non-analgesic PRN medications will prompt for effectiveness with a red star.

4. “One-time” orders and “Pre-Op” medications are charted in the section of the MAR designated for single dose medications. The nurse administering the dose will document the medication name, dose, route, and time of administration. The nurse will sign his/her initials to indicate that the dose has been given, and will then cross through the name of the medication with a yellow marker or perform a similar procedure according to the nursing policy that identifies the order has been completed. For eMAR charting, follow the same charting process as previously outlined in item #5 of general procedures if the dose is administered on the nursing unit. If the dose is administered off the unit (example: in surgery), chart the dose as “not administered” and chart the reason as “already given.”

**Appendix A**

**Timing of Medication Administration**
Medications deemed NOT ELIGIBLE:
- Require exact or precise timing of administration
  - Stat doses
  - First time or loading doses
  - One-time doses
  - Doses timed for procedures (ex: antibiotic on-call to surgery)
  - PRN doses

Medications deemed TIME-CRITICAL:
- Must be administered within 30 minutes before or after the scheduled dosing time
  - Antibiotic Agents (Intravenous)
  - Anticoagulants
  - Anticonvulsant Agents
  - Anti-diabetic Agents (Those administered before/with meals)
    - Acarbose (Precose®)
    - Chlorpropamide (Diabinese®)
    - Glimeperide (Amaryl®)
    - Glipizide (Glucotrol®)
    - Glyburide (Diabeta®, Glynase®)
    - Nateglinide (Starlix®)
    - Repaglinide (Prandin®)
  - Insulin, non-basal
    - 70 / 30
    - Aspart (Novolog®)
    - Lispro (Humalog®)
    - Regular (Humulin® R, Novolin® R)
  - Medications that must be administered separately due to drug / drug or drug / food interaction
  - Medications ordered with a specified timeframe
    - Carbidopa / Levodopa (Sinemet®)
    - Anti-rejection medications
    - HIV medications

Medications deemed NON-TIME-CRITICAL:
- Must be administered within 60 minutes before or after the scheduled dosing time
  - Scheduled meds which are not included in the Time-Critical category above and have a frequency of BID to every 4 hours.

- Must be administered within 120 minutes before or after the scheduled dosing time
  - Scheduled meds which are not included in the Time-Critical category above and have a frequency of daily or greater (i.e. every 36, 48, or 72 hours, weekly, or monthly).