PATIENT CARE RELATED POLICY: MEDICATION MANAGEMENT: 
MAINTENANCE AND ADMINISTRATION OF MEDICATIONS

Date Effective: 07/11
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I. PURPOSE

To establish standards for a safe medication management system that addresses the medication processes of storage, ordering and transcribing, preparing and dispensing, administering and monitoring in accordance to all applicable laws and regulations.

II. DEFINITIONS

Medication includes prescription medications, sample medications, herbal remedies, vitamins, nutraceuticals, over-the-counter drugs, vaccines, diagnostic and contrast agents used on or administered to persons to diagnose, treat, or prevent disease or other abnormal conditions; radioactive medications; respiratory therapy treatments; parenteral nutrition; blood derivatives; intravenous solutions (plain, with electrolytes and/or drugs); and any product designated by the Food and Drug Administration (FDA) as a drug. The definition of medication does not include enteral nutrition solutions (which are considered food products), oxygen, and other medical gases.

Double-check is defined as:

a. independently comparing the label and product contents in hand versus the written order or computer-generated medication administration record (i.e. Patient Worksheet),

b. independently verifying any calculations for doses that require preparation (e.g.; any time the medication is not dispensed in the exact patient-specific unit of use such as partial content of a syringe is wasted, drawing a dose out of a vial or ampule, and dilutions). And,

c. assuring the accuracy of infusion pump programming for continuous intravenous infusions of medications.

d. And is documented in nursing documents

Immediately Administered Medication: An immediately administered medication is one that an authorized staff members prepares or obtains, takes directly to a patient, and administers to that patient without any break in the process

III. POLICY

A. Only authorized personnel by virtue of their license and/or job description have unsupervised access to medications.

B. Medications are ordered (written or entered into the clinical information system, hospital computer system, only by those who are authorized to prescribe.
C. In Ambulatory Care, on-going medication orders will not exceed one year.

D. Medications are dispensed only by those authorized to do so by the nature of their license (physician, pharmacist).

E. Medications are administered only by those authorized to do so by the nature of their license/certification and scope of practice.

F. Medication effects are monitored on a patient-specific and aggregate basis.

G. Prior to administering medications the authorized licensed/certified staff will have demonstrated competency to administer medications.

H. Investigational medications are dispensed/administered in adherence to the Hospital’s Medication Management: Investigational Medications policy.

I. Use of patient’s own medications are specified in the Medication Management: Patient’s Personal Medications policy.

J. Self-medication (bedside medications) is specified in the Medication Management: Bedside Medication policy.

K. The use of multi-dose containers is governed by Medication Management: Multi-Dose Containers policy.

L. Patient-specific information is readily accessible to those involved in the medication management system. This information, available in the computer system, chart or patient record, includes:
   - Patient name, age, sex
   - Current medications
   - Clinical diagnosis and secondary diagnoses, clinical conditions
   - Relevant laboratory values
   - Significant elements of past medical history
   - Medication allergies, sensitivities, past untoward reactions

   As appropriate to the patient, the following information is also available
   - Height and weight
   - Pregnancy and lactation status
   - any other information required for safe medication management
     (including but not limited to Black Box Warnings, drug interactions)

M. Controlled substances are stored to prevent diversion and handled in accordance with the Medication Management: Controlled Substances policy.

N. Patients are identified prior to medication administration in accordance with the Patient Identification policy.

O. High Risk (or High Alert) are handled in accordance with the Medication Management: High Risk Medications policy.

P. LASA (Look Alike/Sound Alike) medications are handled in accordance with the Medication Management: Look Alike/Sound Alike policy.

Q. All medication orders shall be reviewed by a pharmacist and assessed in relation to the patient’s medication profile before administration with the following
exceptions:
1. Medications administered by or under the direct supervision\(^1\) of a physician, dentist or podiatrist;
2. Medications approved by the Pharmacy and Therapeutics Committee for specific treatment circumstances;
3. Medications that require prompt administration to meet the emergent needs of the patient\(^2\).

R. For patients transferring between Emergency Department and an adult critical care unit or amongst the adult critical care unit, current medications should be sent by the sending nursing unit. For all other transfers, such as different levels of care, the sending nursing unit should send all patient medications back to the pharmacy promptly and NOT to the receiving nursing unit.

Injection ports are scrubbed with 70% isopropyl alcohol prior to use,

IV. **PROCEDURE**

<table>
<thead>
<tr>
<th>RESPONSIBLE PERSON(S)/DEPT</th>
<th>A. Handling and Storage of Medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed/Certified Staff</td>
<td>1. Assure all medications are in locked container/cabinet/refrigerator or are under constant surveillance.</td>
</tr>
<tr>
<td></td>
<td>2. Label refrigerated medications with patient’s name/room number.</td>
</tr>
<tr>
<td></td>
<td>3. Store internal and external medications separately.</td>
</tr>
<tr>
<td></td>
<td>4. Store food and/or specimens in a separate area refrigerator.</td>
</tr>
<tr>
<td></td>
<td>5. Do not pour any medication from one container to another even if labels are the same.</td>
</tr>
<tr>
<td></td>
<td>6. Never return excess medication to stock/bulk container.</td>
</tr>
<tr>
<td></td>
<td>7. Pre-drawn syringes are labeled, dated, and discarded at the end of the shift. If prepared by anesthesia for anesthetic use, discard within 24 hours.</td>
</tr>
<tr>
<td></td>
<td>8. Protect all light sensitive medications from direct light.</td>
</tr>
</tbody>
</table>

\(^1\) For the purpose of this policy “direct supervision” means that the physician, dentist or podiatrist is in the same building and is actively managing the patients emerging or progressing condition.

\(^2\) The emergent needs of the patient may include non-life-threatening symptoms, including but not limited to pain or nausea.

10. Return to Pharmacy all discontinued, expired, damaged and/or contaminated medications.

11. Maintain safe and secure handling from the time of obtaining medication from drug storage area to administration:
   - Maintain control of medications at all times
   - Do not carry medications in pocket
   - Keep medication in unit dose package until administration

   **To Return a Medication to Stock/Return Bin**
   a) Medications that come in single dose containers removed from MedStation and not administered to the patient should be returned to Return Bin at the MedStation. Select *Print Slip*, wrap the slip around the return item and drop both of them in the Return Bin.
   b) Medications that come in multiple dose containers removed from MedStation should be returned to the same pocket/drawer in MedStation after the dose has been withdrawn and **BEFORE** the drawer door is closed.
   c) If returning a controlled substance, acquire another authorized licensed staff to act as a witness.
   d) For oversize item which does not fit to return in the Return Bin, select *Print Slip* and write on Slip return item is locked in a secured cabinet or drawer, whichever is the case in specific nursing unit, in the medication room. Drop the Return Slip in the Return Bin. When the drawer is closed, Pyxis generates another Return Slip. Wrap the oversize item with the second Return Slip and locked in secured area mentioned above. If the oversize item is a controlled substance, add the item and quantity to the inventory

12. Conduct monthly unit medication storage inspections and report findings to unit manager.
B. Ordering and Transcribing

1. Medication orders are managed in accordance with the Order Management and Abbreviations (Do Not Use List) Policy and Procedures.
2. Document in the medical record, the condition or indication for use for each medication ordered.
3. Enter orders in hospital computer system in the inpatient setting and/or on appropriate order forms in outpatient setting.
4. Orders for medications and fluids must contain name, dosage, frequency, route of administration, and an indication must be present for all PRNs. Additional required elements:
   a. Drug names are ordered in hospital computer system in generic with optional brand names. A generic equivalent substitute will be made by pharmacy unless prescriber indicates “do not substitute”
   b. Titrating orders: indicate dose rate/range and patient parameters
e. Taper orders: include the dosing limits and duration of therapy for each dose.
   d. Range orders: highest possible should not be more than double the lowest possible and specify indication.
   e. Compounded drugs: include all ingredients and their amounts.
   f. Medication-related devices: include any special instructions, as applicable.
   g. Herbal products: same requirements as any other medication.
h. Medications at discharge: need to be on a prescription blank with all of the legal requirements for a prescription and signed by a licensed prescriber.

5. Adhere to Medication Management: Weight Based Dosing Guidelines.
6. Clarify with prescriber any incomplete, illegible or unclear order before processing.
7. Medication Administration Times: The following tables state the standard protocol that is followed by the Pharmacy and Nursing Departments to interpret physician orders for drug administration time. The hospital computer system automatically defaults to these times, unless the "start at" or "non-standard hours" pathway is initiated.
TABLE 1:

Waking Hours
Around the Clock
STAT - within 15 minutes
NOW - within one hour

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>9AM, 1PM, 5PM, 9PM, 1AM, 5AM</td>
</tr>
<tr>
<td></td>
<td>Q6h</td>
</tr>
<tr>
<td>BID</td>
<td>9AM &amp; 9PM</td>
</tr>
<tr>
<td>BID With Meals</td>
<td>9AM &amp; 5PM</td>
</tr>
<tr>
<td>Q8h</td>
<td>9AM, 5PM, 1AM</td>
</tr>
<tr>
<td>TID</td>
<td>9AM, 1PM, 5PM</td>
</tr>
<tr>
<td>Q12h</td>
<td>9AM, 9PM</td>
</tr>
<tr>
<td>QID</td>
<td>9AM, 1PM, 5PM, 9PM</td>
</tr>
</tbody>
</table>

NOTE: Medications ordered after a standard time will not be administered until the next scheduled time, unless ordered as “Now & then”.

8. Selected drugs not specifically prescribed as to number of doses or duration of therapy requires renewal/review of orders as follows:

TABLE 2:

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedative, hypnotic's</td>
<td>q 10 days</td>
</tr>
<tr>
<td>Anticoagulants (oral)</td>
<td>daily x 5 days (excludes patient stabilized on meds prior to admission), then q 10 days</td>
</tr>
<tr>
<td>Anticoagulants (IV)</td>
<td>q 24 hours</td>
</tr>
<tr>
<td>Antibiotics</td>
<td>q 24h, q 3 days, q 7 days, or q 10 days for chronic prophylaxis for selected approved drugs as ordered</td>
</tr>
<tr>
<td>Topical</td>
<td>no stop date</td>
</tr>
<tr>
<td>Class II narcotics</td>
<td>q 48 hours</td>
</tr>
<tr>
<td>Class III narcotics</td>
<td>q 5 days</td>
</tr>
</tbody>
</table>
Glucocorticosteroids  
q 10 days

All Others  
q 30 days

(All TB and anti-HIV drugs, though anti-infectives are exempt).

Note: All medications requiring review are designated with an ‘R’ on the Patient Worksheet/Outcome Plan. Nursing files this document in the front of the medical record, on a daily basis, for physician review.

C. Preparing and Dispensing

1. Reviews all medication orders prior to dispensing, removal from floor stock, or removal from an automated storage and distribution device unless a Licensed Independent Practitioner controls the ordering, preparation, and administration of the medication; or in urgent situations when the resulting delay would harm the patient, including situations in which the patient experiences a sudden change in clinical status (for example, new onset of nausea).

2. Orders are reviewed for:
   a. The appropriateness of the drug, dose, frequency, and route of administration
   b. Therapeutic duplication
   c. Real or potential allergies or sensitivities
   d. Real or potential interactions between the prescription and other medications, food, and laboratory values
   e. Other contraindications
   f. Variation from organizational criteria for use
   g. Other relevant medication-related issues or concerns.

3. Clarifies all concerns, issues or questions with the prescriber before dispensing medication.

4. Compounds or admixes all sterile medications, intravenous admixtures, or other drugs except in emergencies or when not feasible (for example, when the product’s stability is short).
13. Prepares IV admixtures in accordance with IV Solution Preparation in Patient Care Area Policy and Procedure.
14. Use filtered needles on IV ampule medications.
15. Label all medications not immediately administered with drug name, strength, amount, expiration date when not used within 24-hours or expiration time if less than 24-hours. For all compounded IV admixtures, include the date prepared and the diluent. For additional requirements for labeling medications in peri-operative or procedural areas on and off the sterile field see 18 below.
16. When preparing medications for multiple patients or the person preparing the medications is not the person administering the medication, the label also includes the following:
   a. Patient name
   b. Patient location
   c. Directions for use and any applicable cautionary statements either on the label or attached as an accessory label (for example, “requires refrigeration”, “for IM use only”)
17. Dispense medications in most ready-to-administer form via tube system/delivery.
18. Labeling of all medications and solutions, on and off the sterile field, applies to all settings where procedures are performed. This includes all operative, peri-operative and any area where procedures are done at the bedside:
   a. Medications and solutions, both on and off the sterile field, are labeled even if there is only one medication being used
   b. Labeling occurs when any medication or solution is transferred from the original packaging to another container.
   c. Labels include the drug name, strength, quantity, diluent and volume (if not apparent from the container), preparation date and time, initials, expiration date and time when expiration is less than 24 hours.
   d. All labels are verified, both verbally and visually, by two qualified individuals when the person preparing the medication is not the person administering the medications.
e. Label each medication or solution as soon as it is prepared. There should be no break in the process between preparation and labeling.

f. No more than one medication or solution is labeled at one time.

g. Any medications or solutions found unlabeled are immediately discarded.

h. All original containers from medications or solutions remain available for reference in the perioperative/procedural area until the conclusion of the procedure.

i. All labeled containers on the sterile field are discarded at the conclusion of the procedure.

j. At shift change or break relief, all medications and solutions, both on and off the sterile field, and their labels are reviewed by entering and exiting personnel.

D. Administration

1. Obtains medication order from authorized prescriber.

2. Reviews all medication orders in a timely manner. Clarifies with prescriber if needed before administering.

3. Refers to the Patient Worksheet prior to each dose administration. Non-inpatient areas may utilize the original order and/or other documents. Verifies the order against the order or verbally directly with the prescriber before administering the dose.

4. Prior to administration, reviews drug information to become familiar with effects, dose, rate of administration, and side/adverse effects. Reviews/checks for any patient allergies. Reviews drug interaction (DI), alert information. Verifies DI status.

5. Clarifies with the prescriber and/or pharmacist any concerns/questions prior to administration.

6. Prior to administration, determines therapeutic drug levels and lab values of selected medications, (e.g., Digoxin, Lasix, Coumadin, Phenobarbital, etc.), when indicated.

7. Washes hands prior to handling of medications and/or equipment.

8. Reads label three times prior to administration:
   a. Before removing from storage area
   b. Before preparing medication; and
   c. Before returning to storage area

9. Two licensed staff independently conducts double check for narcotic and sedative continuous IV drips or PCA, insulin, therapeutic IV Heparin and chemotherapy.
RESPONSIBLE
PERSON(S)/DEPT

10. Identifies correct patient by checking two sources of information in accordance with the Patient Identification Policy.
11. For IVs: Prior to administration, identifies appropriate free flow protected infusion pump for specific administration route/rate.
12. Provides education to the patient regarding the medication’s expected effects, possible side/adverse effects and, if applicable, food-drug interaction.
13. Verifies that:
   a. the medication is stable based on visual examination for particulates or discoloration and that the medication has not expired
   b. there is no contraindication for administering the medication
14. Just prior to administration, compares the medication to the order and adheres to the rules of right: right patient, right drug, right dose, right time, right route, right indication, and follows with the right documentation. Include injection site in administration route.
15. Advises the patient, or if appropriate, the family about any potential clinically significant adverse reaction, or other concerns about administering new medication.
16. Observes the patient taking medication
17. Disposes of all contaminated needles, syringes, in appropriate Sharp/waste container.
18. Evaluates the patient’s response to medications and documents for all prn medications.
19. All medications withheld, not given, are documented appropriately.
20. Scrub diaphragms of locks and/or injection ports with 70% isopropyl alcohol prior to injection.

E. Monitoring

1. Monitors the patient after the first dose of a medication per the monitoring guidelines in Micromedex. (for neonatal patients: Medications and Nutrition reference book)
2. Monitor the medications effects on the patient using but not limited to, the patients own perceptions, relevant lab results, clinical response and medication profile, on-going, as appropriate.
3. Medication Errors
RESPONSIBLE PERSON(S)/DEPT

a. In the event of a medication error, notify physician immediately.

b. Submit an Incident Report per Hospital Incident Reporting Policy

4. Adverse Drug Reactions (ADR)

a. Immediately notifies physician of suspected ADR.

b. Reports and documents the ADR per Hospital Adverse Drug Reaction Policy.

V. DOCUMENTATION

RESPONSIBLE PERSON/DEPT.

<table>
<thead>
<tr>
<th>Certified/Licensed Staff</th>
<th>A. DOCUMENTING SCHEDULED MEDS IN HOSPITAL COMPUTER SYSTEM - INPATIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. All medications are charted through Scheduled Activities List (SAL) pathway. This also includes medicated respiratory treatments (MDI, nebulizers).</td>
</tr>
<tr>
<td></td>
<td>2. Scheduled (TID, Q6H, etc.) medication administration times are printed on the Patient Worksheet/Outcome Plan and are highlighted with an asterisk. STATs and NOW orders are considered a scheduled medication, but will not display a time to be given.</td>
</tr>
<tr>
<td></td>
<td>3. A scheduled medication is retrievable to document on for 14 hours after the actual scheduled time due. The &quot;Late Data Entry&quot; pathway must be used if the scheduled medication is not retrievable after this time period.</td>
</tr>
<tr>
<td>Certified/Licensed Staff</td>
<td>4. An unreported scheduled medication list will print out on each unit at the end of shift for review by the RN. This printout will list scheduled meds not charted.</td>
</tr>
<tr>
<td></td>
<td>5. PRN medications require the reason the medication is given (i.e., for pain), be documented, as well as the patient’s response to that medication (pain relieved). A “Med Follow-up” event automatically displays on the SAL for documentation of the patient’s response.</td>
</tr>
</tbody>
</table>

B. DOCUMENTING IV’S PCA’S AND EPIDURALS

1. IV’s will print in the IV section of the Patient Worksheet/Outcome Plan. IV replacement solutions are also listed in this section.

2. IV’s and replacement solutions are charted on when a new bag is hung, via the “SAL/IV” pathway.

3. PCA’s and epidurals are listed as misc/prn meds and are charted on when a new bag/syringe is hung.
C. DOCUMENTING MEDS/IV’S NOT GIVEN

1. All scheduled medications or IV’s not administered must be charted on as “Not done” and the reason why indicated.

REFERENCES

TJC Accreditation Manual for Hospital Standards, 2011
Title 22
California Nursing Practice Act, 2001
Institute for Safe Medication Practices

RELATED STANDARDS

Hospital Policies & Procedures:
- Incident Reporting
- Pharmaceutical Waste
- Patient Identification
- Order Management
- Abbreviations – Do Not Use List
- Food/Drug Interaction Information
- IV Therapy – Peripheral
- Medication Mgmt: Antineoplastic Agents
- Medication Mgmt: Administration of Investigational Medications
- Medication Mgmt: Adverse Drug Reaction
- Medication Mgmt: Bedside Medication Policy
- Medication Mgmt: Controlled Substances
- Medication Mgmt: Drug Samples
- Medication Mgmt: Drug Shortages
- Medication Mgmt: High Risk Medications
- Medication Mgmt: IV Drug Infusion Concentration Standards
- Medication Mgmt: Look Alike/Sound Alike Medications
- Medication Mgmt: Multi-Dose Containers
- Medication Mgmt: Patient Information for Med Order Management
- Medication Mgmt: Patient’s Personal Medications
- Medication Mgmt: Propofol Infusion, Pediatrics
- Medication Mgmt: Stability & Testing of Medication Storage Equipment
- Medication Mgmt: Reporting of Adverse Events
- Medication Mgmt: Weight Based Dosing Guidelines
- Medication Mgmt: Moderate Sedation (formerly Conscious Sedation)

Nursing Services Policies & Procedures: I-103 IV Solution Preparation in Patient Care Areas

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Author: Raja Zeitany, Pharm. D.

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- Medication Safety Committee: June 21, 2011
- Pharmacy & Therapeutics Committee: July 06, 2011
- Med Exec Committee: July 18, 2011