### POLICY/PROCEDURE

<table>
<thead>
<tr>
<th>Approved:</th>
<th>Effective Date: 00/11</th>
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<tr>
<td>Attachments: A Medication decision Guide</td>
<td>Revised Date: 06/04, 10/04, 11/04, 02/05, 06/05, 11/05, 05/06, 12/07, 02/08, 03/09, 08/09, 08/10, 12/10, 02/11, 04/11, 12/11, 06/12, 01/13, 06/13, 04/14, 05/16, 07/16, 1/17, 5/17, 09/17, 10/17</td>
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**Subject:** Medication Administration
- A. Ordering of medication
- B. Administration of Medication
- C. Documentation of Medication Administration
- D. Discrepancy Reporting

**Rationale:** To ensure safety and accuracy in the administration and recording of all medications.

**Scope:** RNs, LPNs, Respiratory Therapists, Pharmacy, Clinical Lab staff, Unit Secretaries and Medical staff

**Definitions:**
- Patient Touch System Manager: software driver and control panel used for viewing and documenting on the eMAR.
- eMAR: An electronic document of medication administration and documentation. Retrospective, printed copies of the previous 24 hour period are printed each morning and placed in the patient chart as part of the permanent medical record.

**POLICY:**

I. The medication room is to be locked at all times. Only RNs, LPNs, Respiratory Therapists, Physicians, Pharmacists, Pharmacy Techs, Clinical Lab staff, and students of the above disciplines are allowed access to the medication room. All other departments...
(Materials Management, Environmental Services, Engineering) requiring access to medication rooms for the purpose of carrying out their non-patient related job responsibilities, must be accompanied by one of the aforementioned employees into the medication room.

II. Prescription blanks are kept in the locked box located on each nursing unit at all times. Physicians may access the prescription forms using their assigned code.

III. The medication administration record (eMAR) is used to reflect physician orders for administration of medications and as documentation of medication administration.

IV. Every night, a licensed nurse verifies the current eMAR on the Patient Touch System Manager against the previous 24-hour printed eMAR located in the patient chart and new physician orders. When omissions, changes and/or errors in medication orders are identified, the nurse communicates them to the pharmacy for correction.

V. The pharmacist inputs all medication orders into the computer to generate the eMAR.

VI. The nurse and/or respiratory therapist and the pharmacist are responsible for the accuracy of the MAR.

VII. Any dose of subcutaneous or IV insulin and any dose of IV Heparin to include rate changes of continuous IV Heparin (excluding Heparin flushes) will be double-checked for accuracy of medication and dose by two nurses prior to administration and documented electronically by both nurses on the eMAR.

VIII. Health care staff may administer medications consistent with applicable Colorado State law and the rules and regulations that apply to their profession, including RNs, LPNs, Respiratory Care, Pharmacy, and other clinical staff within their scope of practice.

IX. On admission, a copy of the patient’s medication administration record or list of meds from home will be sent to the Craig pharmacy for medication reconciliation, when available.

X. Multi-dose items are never shared amongst patients. All patients must have their own designated labeled bottle/vial/bag/inhaler/tube/etc.
XI. Single dose vials are used only once.

XII. Wasting and diluting of Controlled Substances will ALWAYS occur in the med room prior to giving the dose to the patient.

PROCEDURE:
I. ORDERING AND ADMINISTRATION OF MEDICATIONS
   A. Medication Ordering
      1. Only medications needed to treat the patient’s medical condition are ordered
      2. Required elements of a medication order are:
         a. patient name
         b. diagnosis
         c. medication name
         d. dose
         e. route
         f. time
         g. special considerations as needed
      3. Only approved abbreviations are allowed in a medication order. No medications can be abbreviated in an order.
      4. Any new medication order will be added to the eMAR by pharmacy. Prior to administration, the nurse and/or respiratory therapist will review the order for the correctness of drug name, dosage form, frequency, route and time of administration and verify the order via the Patient Touch System Manager.
      5. The nurse and/or respiratory therapist are responsible to notify the patient of the new medication order and document any adverse drug reactions to the first dose per policy MED 05 Medications: Allergies and Adverse Drug Reaction (ADR) Documentation and Reporting.
      6. Any multiuse disposable device/product used to facilitate medication preparation will be patient specific and be wiped clean as needed. For example: Pill Cutters.
      7. Mortars and Pestles will be supplied as nonporous glass and washed before and after each use.
8. The use of the Silent Knight Crusher and plastic sleeves will be the device of choice for crushing as this contains powder dust. The Crusher will also be wiped clean as needed.

B. Prior to the Administration of any medication, the nurse and/or respiratory therapist must verify it is the “right patient” by using (2) two patient verifiers per policy RI11 Patient Identification.

The nurse and/or respiratory therapist will use the patient’s name and a successfully scanned armband for the two different patient identifiers. In the event of a computer outage, the nurse/RT is expected to use two identifiers as defined in policy RI 11 Patient Identification.

C. The nurse/RT is responsible to utilize the 5 rights of medication administration.
   1. Right patient
   2. Right drug
   3. Right dose
   4. Right time
   5. Right route

D. The nurse/RT administering medication will verify the medication is stable based on a visual examination for particulates or discoloration and that the medication has not expired.

E. The administering nurse/RT will verify that there is no known contraindication for administering an ordered medication to a patient such as identified allergy or adverse drug reaction.

F. Before administering a new medication, the patient or family will be informed about any potential clinically significant adverse drug reactions or other concerns regarding administration of a new medication.

G. Medications will be dispensed from Pharmacy in a unit dose form whenever possible. The rubber septum on all medication vials, whether unopened or previously accessed, is disinfected with alcohol prior to piercing.

H. Pharmacy Communication: Pharmacy will communicate to nursing/respiratory therapy drug information, product storage requirements, and delays in delivery and drug substitutions as applicable.

I. Floor Stock Medications
1. Floor stock doses are intended for “STAT” or “FIRST DOSES.”

2. Refer to the MED 06 ACUDOSE policy

J. Use of patient self-administered medications are not allowed (refer to policy IP01 for medications administered during a patient pass and to policy MED 20 Insulin Pump Protocol).

K. Interchange Ability of Dosage Form
   1. The policy MED 17 Route Conversions outlines the specific circumstances when substitution is allowed.
   2. All other dosage form and route changes not outlined in MED 17 require a physician’s order.
   3. Nursing will send an order to Pharmacy. The order must be dated and signed.
   4. Pharmacist: After review of the order, the change is to be noted on MAR. The previously dispensed dosage form will be removed from the patient’s cassette drawer and discontinued on the MAR.

L. Schedules
   1. Based upon the nature of a medication and the drugs’ clinical application, certain medications are not eligible for scheduled dosing times. Those medications include:
      a. Stat dose (given within 15 minutes)
      b. First time or loading doses
      c. One time doses
      d. Time sequenced doses
      e. Doses interdependent with serum drug levels
      f. Investigational drugs
      g. PRN medications

   2. Medication schedules for medications eligible for scheduled dosing times are as follows and may be changed on order of physician:
      a. Generally, unless otherwise noted below, medications, will be scheduled according to the hospital standard administration times

      daily: 0830 or 2100
      b.i.d. (q. 12 hrs.): 0830 and 2100
      t.i.d.: 0830 and 1300 and 2100
      q.i.d.: 0830 and 1300 and 1700 and 2100
      q. 4 hours: 0100 and 0500 and 0830 and 1300 and 1700 and 2100
q. 6 hours  0500 and 1100 and 1700 and 2300
q. 8 hours  0500 and 1300 and 2100

Respiratory medications will be administered as follows:

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dose</th>
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<tbody>
<tr>
<td>RTD</td>
<td>RT daily</td>
</tr>
<tr>
<td>RTBID and RTQ12H</td>
<td>0900 2100</td>
</tr>
<tr>
<td>RTTID</td>
<td>0900 1500</td>
</tr>
<tr>
<td>RTQID</td>
<td>0800 1200 1600 2000</td>
</tr>
<tr>
<td>RTQ6h</td>
<td>0300 0900 1500 2100</td>
</tr>
<tr>
<td>RTQ8H</td>
<td>0730 1530 2330</td>
</tr>
<tr>
<td>RTQ4HWA</td>
<td>0730 1130 1530 1930 2330</td>
</tr>
<tr>
<td>RTQ4H</td>
<td>0330 0730 1130 1530 1930 2330</td>
</tr>
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b. Didronel and levofloxacin will be given at 2100. They must not be given within 2 hours of administering an antacid, calcium, magnesium, ferrous sulfate or food.

c. If a patient is on tube feeding, stop feeding for 2 hours prior to administration and hold tube feeding for 2-hours post administration for the following drugs:
   i. Didronel
   ii. Dilantin
   iii. Quinolones
   iv. Levothyroxine

d. Antibiotics should be given as soon as possible unless otherwise directed. Nursing must communicate start time to pharmacy.
   i. **Oral Antibiotics** – initial dose now and then:
      Daily  0830 or 2100
      BID (q12h)  0830 and 2100
      TID (q8h)  0830, 1300, 2100
      QID (q6h)  0700, 1100, 1700 and 2300
      Q4h  0100, 0500, 0830, 1300, 1700, and 2100
   ii. **All IV antibiotics** should be given as soon as possible unless otherwise directed. Nursing must communicate start time to Pharmacy.

e. Drugs ordered at change of shift will be given by off going shift. The off-going shift must give notification if any medications were not given that shift and why.
Patients receiving IV Heparin, 10,000 units of subcutaneous Heparin in 24 hours, or any dosage of Coumadin, should be assessed prior to receiving intramuscular medications. Generally, IM administration should be avoided in patients receiving IV heparin or warfarin.

twice daily dosing for ferrous sulfate, calcium, magnesium and zinc will be defaulted to 0830 and 1700 to avoid concomitant administration with Didronel and levofloxacin.

Timeliness - unless otherwise noted above otherwise indicated, or specified in the physician order:

- In conjunction with Nursing, Respiratory Therapy and consistent with this policy, start and schedule times on new drug orders will be determined by the pharmacist.

- Decreases to current orders will go into effect as follows:
  - Daily to Q48h; BID to Daily; or any changes from Q4H, Q6H, Q8H; use the last time administered as start time for new order. If after 2100, start next day
  - TID to BID if after 1300 begin taper next day; If before 1300 skip 1300 dose.
  - QID to TID if after 1700; begin taper next day; if before 1700 skip 1700 dose

- All other changes will go into effect at the next application major med pass times.

- Generally, routine medications may be given up to 60 minutes before or 60 minutes after the scheduled time. This 120 minutes range is allowed to help educate patients regarding acceptable ranges once they return home, as rigid time restraints increase the likelihood of non-compliance.

- Nursing staff may reschedule early or late doses when the following are present:
  - Change in patient condition
  - Patient unavailable
  - Patient refusal
  - Medication unavailable

- Medications eligible for scheduled dosing times that are administered outside the 120 minute window must have documentation stating the reason for the late or early administration.

- The physician or other practitioner should be notified when medications are given outside the 120 minute
window if the change in administration time is deemed to have a negative impact on the patient.

viii. In addition to the above, scheduled controlled substances must be given within one hour of removal from AcuDose and PRN controlled substances must be given within 30 minutes of removal from AcuDose.

M. When wasting or diluting is required, all controlled substances must follow these steps in order for Administration: (MED 04)
   i. Verify dose needed with/for Patient
   ii. Remove drug from AcuDose
   iii. In Med Room: Waste if required
   iv. In Med Room: Dilute if required
   v. In Med Room: Prep if required
   vi. Go to Patient room and administer
   vii. CNCs must be contacted for any wastes that do not follow this step by step order.

N. Administration of Investigational New Drugs: Investigational new drugs are given according to written protocol, which have been approved by the Institutional Review Board. (Refer to MED 02 Administrations of Investigational Drugs/Devices)

I. DOCUMENTATION OF MEDICATION ADMINISTRATION

A. All medications are listed on the medication administration record (eMAR). All medication doses administered will be documented on the eMAR using the bar code scanner or the barcode scanning software. The Patient Safe System (PSS) MAR is the official MAR.

B. In event that medications can not be documented electronically via the bar coding software, late entries must be made once the issue with the barcoding system has resolved. Hand written entries to the printed eMAR are NOT adequate documentation as the printed version of the eMAR does not become part of the legal medical record.

C. In the event of a planned or long term downtime written documentation of administered medications MAY be coordinated and communicated between Nursing, RT, Pharmacy and HIM.

D. The following medications are documented on the eMAR and on an additional specified form:
1. Preoperative medications - Preoperative Check Sheet.

C. Documentation of insulin and point of care blood glucose (POCBG) readings.
   1. POCBG results are automatically downloaded from the glucose monitoring device when docked in its base. The results can be retrieved via Meditech.
   2. All doses of insulin are to be documented on the eMAR

D. When a digitalis preparation is administered, document apical pulse on the medication record. If apical pulse is 60 or below, do not administer the digitalis unless the physician has written orders to dose.

E. Medication orders are automatically cancelled by surgery requiring general anesthesia.
   1. The surgeon or appropriate physician must write and/or verify medication orders for the postoperative period.
   2. If the physician is not in the hospital, the nurse will contact the attending physician for post-op med orders.
   3. The nurse is responsible to read each medication the patient was on pre-op back to the physician for clarification in re-ordering post-op meds.
   4. The nurse writes the new medications as a telephone order, via the verbal order policy.

F. Automatic Stop/Renewal Orders
   1. All medications and treatments will be reviewed every 30 days.
   2. Refer to MED 09- 30 Day Medication and Treatment Review.

G. PRN Medications
   1. When ordering prn medications, the physician must include the purpose for the medication in the order.
   2. Pharmacy issues an adequate supply of PRN medications in PRN Baggies to be stored in the individual patient cubbies. Most medications may be found in the Acudose- refer to the Acudose policy.
   3. All PRN doses administered will be documented on the eMAR.

H. One Dose Only Medications:
   1. When a specific time of administration is ordered for a one dose only medication, it is entered on the eMAR in the same manner as a regularly scheduled medication, and discontinued after the dose is given.

I. IV Therapy
1. Scheduled minibags and other intermittent IV drug doses (including fat emulsion) are shown in the SCHEDULED section of the eMAR. Minibags, that are PRN, are shown onto the PRN section of the eMAR.

2. Large volume parental with or without additives, solutions to administer blood products and TPN solutions are shown in the “IV medication” section of the MAR.

3. Refer to policy IV 03 Intravenous Therapy: General Guidelines for skills a LPN may perform regarding IV Therapy.

J. Discontinued/Resume/Hold/If Orders
   1. When the physician writes to discontinue a medication, the nurse/RT verifies the discontinuation of the medication order in the Patient Touch System Manager.
   3. All Hold orders are automatically discontinued.
   4. Nursing/RT/Rx will not carry out “Resume” orders.
   5. “If” orders, that instruct others to give treatment “if” approved by another provider, are not allowed.

K. Pre-Op and On-Call Orders
   1. Pre-Op and On-Call medications are listed on the scheduled section of the eMAR and the word “Pre-Op” will appear on the comment section if no other administration time was specified. Special comments will be included on the order.
   2. Patients can not receive any sedation, prior to surgery at SMC. All sedation will occur in the pre-op holding area.
   3. Resume pre-op medications is not an acceptable order.

L. Recording of Medication Not Given
   1. When a regularly scheduled dose of medication is not administered, the nurse/RT will record the dose as omitted and indicate the reason why the medication was not given.

M. Multi Route Administration
   1. When a medication is ordered via a Multi route administration the RN determines appropriate route of administration based on nursing assessment. The nurse will document on the eMAR the route used and omit the dosage form not given in the Patient Touch System Manager.

N. Patient Own Medication (from home)
   1. Refer to policy RX-II-06 Patient Medications Brought into the Hospital
   2. Medications brought from home. MD writes “patient may
use own meds”, nursing /RT must transcribe onto a physician’s order form the name of the meds, indication, dose and directions for use.

3. All medications will be given to the pharmacists for identification of the medication and visual evaluation of its integrity. The physician will be notified by the pharmacist if medications brought into the hospital by a patient or their family is not permitted.

O. Insulin Combination Orders
   1. When more than one type of insulin is ordered they appear on the eMAR as separate entries.

III. DISCREPANCY REPORTING

A. A medication/IV/Respiratory treatment error shall consist of medication administered:
   1. To the wrong patient(s).
   2. In the wrong dose or amount.
   3. Is the wrong medication.
   4. At the wrong time (beyond 1 hour before or after time ordered).
   5. Via the wrong route.
   6. To a patient who has a stated allergy to that drug.
   7. Failing to administer an ordered medication/IV.

B. For Respiratory Care:
   1. If a patient refuses any respiratory treatment, the respiratory therapist will be responsible to document this in the physician progress notes so the physician can be notified. This is not an error.
   2. When an order is written for a patient to go out on pass, the ordering physician will be aware of what respiratory treatments will be missed, prior to writing the order. This is not an error.

C. The person discovering the error will document all medication/IV errors on an incident report. The attending physician and/or the prescribing physician will be notified of all medication errors:
   1. Immediately, when the medication error involves wrong patient, wrong drug or wrong dose and results in significant change in patient’s clinical status, mental status, and/or vital signs.
   2. Within 24 hours, all other errors will be reported to the attending physician and/or the prescribing physician.
D. The attending physician will be responsible for discussing the incident with the patient and reviewing any changes in the treatment plan as deemed necessary.

E. After the physician(s) has been informed about the error, the Nurse Manager, or Respiratory Manager will review the incident report.

F. Nurse Managers or Respiratory Manager will follow-up with the appropriate staff involved in the error. The manager will take a non-punitive approach to the investigation.

G. All incident reports will be submitted to administration for review. A summary report will be presented to the Pharmacy and Therapeutics committee, which reports to the Medical Staff Executive Committee and subsequently to the Board of Directors.

IV. Monitoring and Evaluation of Medication System per policy RX III 01 Evaluation of the Medication Management System.