

**SUBJECT: MEDICATION ADMINISTRATION** 

POLICY NO. 325Q

CATEGORY: Provision of Care	EFFECTIVE DATE: 12/18
POLICY CONTACT: Jennie Ung, PharmD	UPDATE/REVISION DATE: 10/21
REVIEWED BY COMMITTEE(S): Pharmacy and Therapeutics	

### **PURPOSE:**

To provide guidelines regarding the administration of medications.

#### **POLICY:**

Medications shall only be administered by, or under the direct supervision of, appropriately by licensed personnel in accordance with laws, rules and regulations governing such acts and in accordance with approved medical staff rules and regulations.

In emergent situations (i.e., RRT, Code Blue, Code White), one or more of these requirements may be waived to ensure timely provision of care.

#### PROCEDURE:

- I. Staff authorized to administer medications may administer medications and biologicals in accordance with their scope of practice, training, departmental and hospital policies, procedures, or protocols. These staff include:
  - A. Licensed independent practitioners (LIPs) including Medical Doctor (MD), Doctor of Osteopathic Medicine (DO), Doctor of Optometry (OD), Doctor of Dental Surgery (DDS), Physician Assistant (PA), Nurse Practitioner (NP) and Certified Midwives (CNM), and Certified Registered Nurse Anesthetists (CRNA)
  - B. Licensed pharmacists (RPh)
  - C. Nursing
    - 1. Licensed nursing staff (RNs and LVNs)
    - 2. LVNs shall NOT administer investigational drugs, intravenous medications (except maintenance IVFs containing KCl up to 40mEq/L), patient-controlled analgesia (PCA), antineoplastic/biotherapy agents.
    - 3. Student Nurses:
      - Student nurses administer medications only under the direct supervision of the Affiliate School Faculty.

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**APPROVED BY:** 

Anish Manajan, MD

**Chief Executive Officer** 

Anish Mahajan, MD

**Chief Medical Officer** 

Joy LaGrone, RN, MSN

Interim Chief Nursing Officer



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- The Affiliate School Faculty must be present and directly supervise while the nursing student prepares and administers medications.
- Student nurses shall not administer investigational drugs, patient-controlled analgesia (PCA), antineoplastic/biotherapy agents.
- D. Respiratory Care Practitioners (RCPs)
  - 1. Authorized to administer pharmacologic, diagnostic and therapeutic agents related to respiratory care.
  - 2. Authorized to administer gases such as oxygen, medical air, and Nitric Oxide, etc., in accordance with their policy.
- E. Certified Medical Assistants (CMAs)
  - 1. Authorized to administer medications outlined below in the ambulatory care services after verification by the RN/LVN.
    - Vaccines: single dose vaccine only (i.e., Rotavirus, Pentacel, Varicella)
    - Oral medications (except controlled substances or antineoplastic agents)
- F. Radiology Technologists authorized to administer IV and contrast media (IV or PO) in accordance with the Radiology Department Policy (Handling of Contrast Agents in Radiology Department).
- G. Nuclear Medicine Technologists authorized to administer IV and radiopharmaceuticals in accordance with department policy.
- H. Physical Therapists (PTs) may only apply topical medications by direct application, iontophoresis, or photopheresis, upon a written order by a practitioner authorized to prescribe such medications.
- I. Occupational therapist/Speech pathologist authorized to administer diagnostic oral barium in accordance with department policy
- J. Self-administration by patients Patients are only allowed to self-administer selected medications during hospitalization (refer to Hospital Policy 329: Bedside and Self-Administration of Medications).
- K. All medications brought from outside for use in the hospital or clinics shall be properly identified and verified by a pharmacist prior to use (refer to Hospital Policy: 325B Patient Own Medication).

#### II. Hand Hygiene

- A. Hand hygiene must be performed in accordance with Hospital Policy 471: Hand Hygiene in Healthcare Settings.
- B. Hand hygiene will be observed by all staff before and after handling medications.

### III. Intravenous Medications

For administration of intravenous medications, refer to Hospital Policy 325M: Guidelines for Intravenous Medication Administration.

#### IV. Medication Orders

- A. For medication order requirements and medication administration time schedules, standards and drip guidelines, refer to Hospital Policy 325: Medication Prescribing.
- B. For Turnaround time, refer to Appendix A.
- C. Staff administering medications shall bring questions or concerns regarding medication orders to the attention of the prescribing practitioner prior to administration.

#### V. New Medications

Staff administering medications must advise the patient or family about common and clinically significant adverse reactions, or other concerns about the new medication. Document in the chart if



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unable to provide education to the patient or family due to the patient condition (i.e., altered mental status, intubated, etc.)

#### VI. High-Alert Medications

For administration of High Alert Medications, refer to Hospital Policy 396: High Alert Medications.

### VII. Drug Storage and Security

- A. Pharmacy has overall oversight of medication management; monthly unit inspection is performed as required to ensure proper drug storage and security. However, all staff are responsible to enforcing and complying with policy and procedure. Only approved pharmacy personnel and *licensed* nursing staff (RN/LVN) are approved to access medication storage rooms and are issued key/keypad access codes.
- B. Nursing areas must have adequate space for storage and preparation of medication doses. All such spaces are secured and accessible only to licensed and authorized personnel. Non-licensed personnel (i.e., EVS, IT, FM, etc.) must be under direct supervision of a licensed staff while accessing a medication storage area.
- C. Medication room/cart/cabinet, automated dispensing cabinet must be kept locked at all times.
- D. Keypad access code to drug storage areas may not be shared with non-licensed personnel. Any changes in access code must communicated with pharmacy management.
- E. Diagnostic agents and food shall be stored separately from pharmaceuticals.
- F. Licensed personnel shall handle only medications that are within their scope of practice.
- G. For removal of medication from a drug storage area (Automated Dispensing Cabinet or floor stock), refer to Hospital Policy 395: Automated Dispensing Cabinets.
- H. A pharmacist reviews the medication order before it is removed from a drug storage area or dispensed from pharmacy, unless a LIP controls the ordering, preparation, and administration of the medication or when a delay would harm the patient in an urgent situation (including sudden changes in a patient's clinical status).
- 1. All medications must be removed just prior to administration and only for one patient at a time.
- J. Once removed from the storage area, the medication shall not be left unattended.
- K. The medication should not be left on or in any area exceeding 25 degrees Celsius or placed in clothing or jacket pockets.
- L. If the patient refuses any medications for any reasons, the medication must be returned or discarded to the designated receptacle as soon as possible and no later than 1 hour after removal; if the medication was removed for a procedure, it must be returned or discarded by the end of the procedure. Wasting of controlled substances must be documented and witnessed in accordance to Hospital Policy 395.
- M. Medications must be transported/transferred to the new patient care area in a hospital-approved bag/kit. Refer to Hospital Policy 325N: Handling of Medications During Patient Transfers.
- N. Remove only the medications needed for the current dose/treatment. All medications must remain in a secured location until time of administration.

### VIII. Medication Preparation

- A. Pharmacy staff compounds or admixes all compounded sterile preparation. A provider may compound in urgent situations in which a delay could harm the patient.
  - 1. <u>Compounding</u> is a practice in which a person mixes, combines or alters two or more ingredients to create a product tailored to the needs of an individual patient.
- B. Nursing staff shall not compound under any circumstances.



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- C. Medications requiring preparation, such as drawing up insulin or reconstituting pantoprazole, will be carried out in an area designated as the medication preparation area or at the patient bedside using aseptic technique.
  - 1. <u>Reconstitution/dilution</u> = a simple act of adding a predetermined volume of saline, D5W or Sterile Water for Injection to a powdered form (pantoprazole) or further diluting a liquid form (famotidine) of medication prior to administration.
  - 2. Do not use saline flush for drug dilution.
- D. The medication must be appropriately labelled if it is not administered immediately, or if it is not administered by the same person drawing up the medication. The label must include:
  - 1. Patient identification (name and MRN)
  - 2. Medication name, strength, and amount
  - 3. Exact one hour "beyond use date" or "use by" from preparation time

    Note: An immediately administered medication is one that an authorized staff member prepares
    and takes directly to a patient and administers to that patient without any break in the process.
- E. Filter needles shall be used when withdrawing medication from ampules.
- F. Pill Cutting
  - 1. All manipulation (i.e., cutting, crushing) of hazardous drugs must be handled by pharmacy (see Hospital Policy 325£: Handling of Hazardous Drugs
  - 2. Nurses may cut non-hazardous drugs.
  - 3. Consult pharmacy for unscored tablets. Pharmacist may:
    - i. Substitute with an equivalent dose of liquid dosage form if available
    - ii. Recommend cutting if it is feasible, safe and the integrity of the drug is not compromised (consider irregular shape, drug with small therapeutic window, sustained/controlled release or enteric coated).
    - iii. If liquid dosage form is not available and tablet cannot be cut, pharmacist shall contact the team to recommend an alternative option.
  - 4. Pill cutters must be for single patient use and labeled with the Name and MRN
- G. Hand hygiene will be observed by all staff in every step of the medication preparation process.

#### IX. Drug Administration Procedures

- A. For non-provider staff (i.e., RN, RCP):
  - 1. Obtain medication order from authorized prescriber
  - 2. Reviews medication orders in a timely manner; clarify as needed before administering
- B. Use 2 patient identifiers to verify the correct patient (Name and MRN or DOB).
- C. Before administration, the individual administering does the following:
  - 1. Verify the medication selected matches the medication order and product label
  - 2. Visually inspect the medication for particulates, discoloration or other loss of integrity
  - 3. Verify the medication has not expired
  - 4. Verify that no contraindication exists
  - 5. Verify the "8 Rights" when administering drugs: Right patient, right medication, right dose, right route, right time, right reason, right documentation, and right response.
  - 6. Discuss any concerns about the medication with the patient's LIP and or staff involved with the patient's care, treatment and services
- D. Before administering a new medication, the patient or family is informed about any potential clinically significant adverse drug reactions or other concerns regarding administration of the medication.
- E. Review drug information to become familiar with effects, dose, rate of administration, side effects.



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- F. Check patient allergy and review other drug warnings
- G. Do not remove unit dose from the container or blister pack until at the bedside
- H. Inpatient nurses MUST wear a sash during routine medication preparation and medication administration.
- I. Use Barcode Medication Administration (BCMA) technology to scan patient's identification band and medications prior to administration in all areas with BCMA capability (see appendix C).
- J. In addition to scanning the patient and medications, the smart pump must be scanned prior to IV medication infusion in all areas with BCMA capability.
- K. See appendix D for the list of BCMA workflows.
- L. Flushes will be administered according to provider orders.
- M. Isolation
  - 1. Avoid bringing multi-dose vials and bulk medications into isolation rooms
  - 2. When feasible, prepare ordered dose outside of the isolation room; use flag labels for product labeling and bedside scanning
  - 3. When preparation outside of the isolation room is not feasible (e.g., eye drop), disinfect the medication bottle/container before returning to storage area to prevent cross contamination.
- N. Hand hygiene must be observed before removing medication from Pyxis, and before and after administering medication(s) to the patient.

### X. Medication Administration for Patients in Transmission-based Precautions

- A. Every effort will be made by Pharmacy to deliver only single-dose medications for patients in transmission-based precautions.
- B. If a single-dose medication is not available and a bulk medication or multi-dose medication is delivered, Pharmacy will:
  - 1. Include bar-coded label corresponding to the medication.
  - 2. Place a clear tape over the patient label on the bulk medication or multi-dose medication container.
- C. To prevent cross-contamination of microorganisms, equipment and supplies used during medication administration to patients on transmission-based precautions must either be discarded, or if reusable, must be cleaned and disinfected before they are moved out of the room or bedside.
- D. Medication administration procedure for patients in transmission-based precautions
  - 1. Metered-dose Inhaler (MDI):
    - RN/LVN will remove MDI from cassette for Respiratory Care Practitioner (RCP).
    - RCP will:
      - o Perform hand hygiene and don gloves
      - o Administer medication
      - Disinfect MDI, and leave MDI at bedside in the plastic bag labeled with the patient's information
      - o Remove gloves and perform hand hygiene

### 2. Eye/Ear Drops:

- RN/LVN will:
  - o Bring medication bottle to bedside
  - o Perform hand hygiene and don gloves
  - o Administers medication
  - Wipe outside of medication bottle with alcohol wipe and put the medication on the side table



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- o Remove gloves and perform hand hygiene and don a new pair of gloves
- o Pick up the medication bottle with alcohol wipe and disinfect the bottle once more
- o Remove and discard the gloves without putting the medication bottle down
- Return medication to patient's cassette
- Perform hand hygiene

### 3. Topical Medications:

- RN/LVN will:
  - o Perform hand hygiene and don gloves
  - o Remove medication from patient cassette
  - Remove and place sufficient amount of medication into small medicine cups—do NOT bring medication tubes or bottles into the isolation room.
  - Return medication to patient's cassette
  - o Remove gloves and perform hand hygiene
  - o Bring medicine cup to bedside
  - Perform hand hygiene and don gloves
  - o Administer medication
  - o Discard the medicine cup
  - o Remove gloves and perform hand hygiene.

#### 4. Multi-Dose Vials (MDVs):

- Multi-dose vials should be dedicated to a single patient with the exception of subcutaneous insulin (follow the insulin workflow)
- Disinfect top of medication vial with alcohol wipe prior to withdrawal of medication
- If a multi-dose vial enters the immediate patient treatment area, it should be dedicated to that patient only and discarded after use.
- All MDVs must have a 28-day 'use by' sticker (28 days from the day punctured).

#### XI. Drug Recalls

Pharmacy manages recalls of pharmaceuticals and notifies impacted stakeholders (i.e., Department Chairs, Clinical Nursing Directors, Hospital Leadership) of the recalls and mitigation plans, if any (see Pharmacy Policy 131: Recall (drugs).

#### XII. Timing of medication administration

### A. Definitions:

- 1. Scheduled medications: all maintenance doses administered according to a standard, repeated cycle of frequency (e.g., q4h, daily, BID, TID, QID, QHS)
- 2. Time critical scheduled medications: medications where early or delayed administration of maintenance doses of greater than 30 minutes before or after the scheduled dose may cause harm or result in substantial sub-optimal therapy of pharmacologic effect
- 3. Non-time-critical scheduled medications: medications where early or delayed administration within a specified range of either an hour or two should not cause harm or result in sub-optimal therapy of pharmacologic effect.
- B. Timing of Medication Administration: refer to Appendix B

#### XIII. Documentation of Administration

A. Administration of medication must be documented on the electronic Medication Administration Record (eMAR).



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- 1. Code blue/white: document on CardioPulmonary Resuscitation Record
- 2. Cath Lab: document on the MERGE system
- 3. Anesthesia: document in SA Anesthesia solution
- B. Each dose of medication shall be recorded properly in the patient's medical record, which may include clinical response to medications.
- C. When a scheduled dose is administered late, chart it as is with a late reason.
- D. Nurses can only reschedule one dose of medication at a time; rescheduling of all subsequent doses must be performed by a pharmacist.
- E. Notify the prescribing or covering provider when the following occurs:
  - 1. Medication is not administered within their permitted window of time (Appendix A)
  - 2. Doses missed due to the patient being temporarily away from the nursing unit (for tests or procedures)
  - 3. Patient refusal
  - 4. Patient inability to take the medication
  - 5. Problems related to medication availability
  - 6. Other reasons that result in missed or late dose administration

#### XIV. Block Charting

- A. Block charting refers to an abbreviated method of charting that may be utilized in the care of patients during which normal medication documentation would put undue strain on the ability of health care professionals to provide high level care for critically ill unstable patients.
- B. Block charting is limited to the following classes of medications only. Medications outside of the below classes are not eligible for documentation utilizing block charting.
  - 1. Sedative and analgesic agents, including but not limited to midazolam, lorazepam, dexmedetomidine, propofol, ketamine, fentanyl, morphine, and/or hydromorphone.
  - 2. Vasoactive agents, including but not limited to norepinephrine, phenylephrine, epinephrine, dopamine, dobutamine, milrinone, isoproterenol, angiotensin II, nicardipine, nitroprusside, nitroglycerine, esmolol, labetalol, and/or diltiazem.
- C. Block charting is limited to the following clinical scenarios:
  - Any critically ill patient requiring rapid titration of eligible mediations in order to reach or maintain physiologic stability such as immediately postoperative, active resuscitation or emergent phases of care.
  - 2. During the immediate post cardiac arrest period after return of spontaneous circulation has been achieved.
  - 3. During the immediate peri-procedure period for high risk and/or urgent procedure (e.g., placement of mechanical circulatory support (ECMO), LVAD, Impella, balloon pump, and prone positioning).
  - 4. This does not apply to weaning.
- D. Documentation of block charting shall be done within the electronic health record. The following information is required in all block charting documentation:
  - 1. Date and time block charting initiated
  - Reason for initiation of block charting
  - 3. Rate of eligible medication(s) at the INITIATION of block charting session
  - 4. Maximum rate achieved during the entire block charting period
  - 5. Assessment parameters and/or titration goal used during the titration
  - 6. Rate of eligible medication(s) at the COMPLETION of block charting session
  - 7. Date and time block charting stopped



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E. Each individual block charting session is limited to the duration necessary to achieve clinical stability or to a maximum duration of 4 hours (whichever occurs first).

#### XV.Pausing as a component of Titration

- A. Medication may be titrated to OFF if it is no longer needed to meet the ordered physiologic titration parameter/endpoint. In the presence of an active order, this is considered "pausing" of the medication. A continuous infusion is discontinued when a provider discontinues the medication order.
- B. Continuous infusions and corresponding orders are evaluated through as needed ongoing communication between the nurse performing the titration and the ordering provider or the critical care team.
- C. For continuous infusions where the medication has been titrated off, and an active order remains on the chart, the medication may be restarted. Infusion may be restarted at the same rate prior to pausing.
- D. For continuous sedatives and analgesics, nurse may intermittently pause sedatives and analgesics to facilitate a spontaneous awakening trial (SAT). If therapy is required to be restarted to meet desired clinical endpoints, the medication may be resumed at 50% of the infusion rate immediately prior to the SAT.
- E. When an infusion has been weaned off or paused for up to 6 hours and the patient is stable and at goal, the order should be discontinued by a provider.

#### XVI. Monitoring

- A. Individual administering the medication monitors the medication effects using, but not limited to, the patient own perceptions, relevant lab results as appropriate.
- B. Notify provider of suspected Adverse Drug Reaction (ADR) or medication errors.
- C. Report and document ADR/medication errors: refer to Hospital Policy 330: Adverse Drug Event Reporting.
- XVII. Medication Administration Documentation for Transport **outside of** Harbor UCLA Medical Center (HUMC):
  - A. Upon returning to HUMC:
    - 1. Provider transporting patient must enter medications ordered on electronic health record (eHR).
    - 2. Nurse transporting patient must document ALL medication administration on eMAR (controlled and non-controlled).
  - B. When controlled substance (CS) is administered to patient during transport, any unused or partial CS not administered must be physically wasted and discarded with a witness (licensed personnel). Do not bring partial CS back to HUMC.

Revised and Approved by:

Medical Executive Committee on 10/2021

Beverley Petrie M.D.

Professional Staff Association, President



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### Appendix A: Turnaround time

Turnaround time: interval between the times an order is initially prescribed to the time that administration is started.

#### "STAT" = 15 minutes or less

- A STAT order involves the use of medication with an immediate onset of action, and that is needed in a
  potentially life threatening, emergency situation, or when there is severe patient discomfort.
- Prescriber will notify the primary nurse when a STAT order is placed.
- Nurses will obtain STAT medications from Pyxis or servicing pharmacy.

#### "NOW" = 60 minutes

 A "NOW" order involves a priority medication needed as soon as possible to treat an acute patient care condition.

### "ROUTINE" = 120 minutes for the first dose

A routine order is not considered an urgent patient care order.

Appendix B: Timing of medication administration (CoP §482.23)

	Time Critical medications
Administer at the indicated time window)	or within 30 minutes before or after the scheduled time (total 1 hour
Meal sensitive agents	<ul><li>Rapid or short acting insulin</li><li>Sulfonylureas</li></ul>
Opioids	All scheduled doses
Immuno-suppressive agents	Cyclosporine or modified cyclosporine     Mycophenolate mofetil     Sirolimus     Tacrolimus
Others	<ul> <li>Medications dosed every 4 hours or more frequently (e.g., q3h, q2h or q1h)</li> <li>Medication which must be administered apart from other medications due to drug-drug interactions (levofloxacin and antacids)</li> </ul>
	Non-Time Critical medications
More frequent than daily but no more frequent than every 4 hours (q6h, q8h, q12h)	<ul> <li>Give within 1 hour before or after scheduled time (total 2-hour window)</li> </ul>
Prescribed daily or longer (weekly, monthly)	<ul> <li>Give within 2 hours before or after scheduled time (total 4-hour window)</li> </ul>

## Appendix C: Areas with BCMA accessibility

- · All inpatient units
- Emergency Department
- PACU
- Procedural areas: Cath Lab and IR

Ambulatory Care areas: Infusion Clinic, Infusion Clinic II, Urgent Care, and Pediatric Clinic



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## **Appendix D: Controlled Medications in Clinics Without Pyxis**

- 1. Controlled medications must be locked separately and with double lock security. They must always be available for inspection by authorized agents (i.e., Pharmacy and Drug Enforcement Administration, U.S. Department of Justice or the California State Bureau of Narcotic Enforcement.
- 2. Controlled medications including Schedule II substances may be administered by licensed nursing personnel and/or physician.
- 3. Controlled medications are issued by Pharmacy and licensed nurses are responsible for ordering and picking up controlled medications as needed.
- 4. Controlled substances shall be accounted for when the responsibility for these substance changes (i.e. change of shift). The departing nurse must correct any errors before relinquishing the key to the oncoming nurse. If the error cannot be corrected, the discrepancy must be reported to the Supervising Clinic Nurse (SCN)/Nurse Manager (NM) immediately.
- 5. The Narcotic and Controlled Drug Administration Record is utilized by staff to document administration of controlled drug for a specific patient including date, time, patient's name, dose given, amount discarded if any, prescribing physician and who administered the medication. The SCN/NM reviews the record regularly and verifies that complete information is recorded for each shift. All records are maintained and secured in the medication room.
- Custody of the controlled medication and controlled medication key is the responsibility of the licensed
  personnel assigned. If/when the nurse leaves the patient care area the key must be relinquished to the
  licensed nurse left in charge of the area. If the nurse accidentally takes the keys home, she is to return
  them immediately.
- 7. A controlled drug may not be used for more than one dose and/or more than one patient. If a patient is to receive a fractional dose the unit dose which is closest to the ordered size is used. The dose given, and the amount wasted are recorded on the same line on the Narcotic and Controlled Drug Administration Record.
- 8. If a nurse loses a controlled medication, he/she is required to:
  - i. Notify unit SCN/NM and complete the "Loss of Controlled Drug Reporting Form" per instructions
  - ii. Document the loo (including the lost narcotic number) in the "wastage and Spoilage" section on the Narcotic and Controlled Drug Administration Record.

#### Resources:

Healthcare Infection Control Practices Advisory Committee, 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings <a href="http://www.cdc.gov/ncidod/dhqp/pdf/isolation2007.pdf">http://www.cdc.gov/ncidod/dhqp/pdf/isolation2007.pdf</a> www.cdc.gov/injectionsafety/providers/provider fags multivials.<a href="http://www.cdc.gov/injectionsafety/providers/