# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purpose</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Scope</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Definitions</td>
<td>2 to 4</td>
</tr>
<tr>
<td>4</td>
<td>Policy Statements</td>
<td>4 to 6</td>
</tr>
<tr>
<td>5</td>
<td>Procedural Appendices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CAREGIVERS AUTHORIZED TO ADMINISTER MEDICATIONS: APPENDIX A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GENERAL MEDICATION ADMINISTRATION PROCEDURES: APPENDIX B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASSESSMENT AND MONITORING OF PATIENTS RECEIVING MEDICATIONS: APPENDIX C</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PROCEDURAL INFORMATION RELATED TO USE OF AUBC: APPENDIX D</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PROCEDURAL INFORMATION RELATED TO STANDARD MEDICATION ADMINISTRATION TIMES: APPENDIX E</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Cross References; Prior Version Dates</td>
<td>6 to 8</td>
</tr>
</tbody>
</table>
1. PURPOSE

To provide caregivers with uniform guidelines for all aspects of safe medication administration, including use of technology at the point of care.

2. SCOPE

This policy applies to all inpatient units and hospital based clinics or departments in any entity or facility owned, in whole or in part, and controlled by Aurora Health Care. **Note:** The medication administration times are out of scope for neonatal medications and Respiratory Department administered medications.

3. DEFINITIONS

**Automated Unit Based Cabinet (AUBC)** is a point of care system to support the safe, timely, and accurate distribution of medications to patients, generate billing and pharmacy inventory management information, and promote effective medication control.

**Bar Code Medication Administration (BCMA)** is a point of care technology used to verify patient identification and medications during the medication administration process. The use of BCMA provides another medication safety check in conjunction with the rights for safe medication administration.

Note that BCMA is **out of scope** when the following circumstances are present:
- Patient is receiving an emergent medication
- Patient is taking personal medications from home
- An investigational medication is being prescribed
- Patient is self-administering medications
- Medications prescribed during the intraoperative and intraprocedural phases
- Patients are receiving photodynamic therapy

**Computerized Provider Order Entry (CPOE)** is a computer application in the electronic health record that accepts provider orders electronically.

**Electronic Health Record** (EHR) is the permanent electronic medical record.

**Electronic Medication Administration Record (eMAR)** is a computer application in the electronic health record that provides a permanent archived record of all medications a patient receives during an episode of care.

**eMAR Downtime Form** is a paper record of medications administered during an electronic health record downtime.

**Licensed Independent Practitioner (LIP)** is defined as any individual permitted by law to provide care and services, without direction or supervision, within the scope of the practitioner’s license and privileges (Joint Commission, 2011).

**Medication Process** described in the Centers for Medicare and Medicaid Services (CMS) regulations (2014) as a five-stage process that encompasses ordering/prescribing, transcribing/verifying, dispensing/delivery, administering, and monitoring/reporting.
Medications are defined as any prescription medications, sample medications, herbal remedies, vitamins, nutriceuticals, over-the-counter medications, vaccines, diagnostic and contrast agents used on persons to diagnose, treat or prevent disease, radioactive medication, respiratory therapy treatments, parenteral nutrition, blood derivatives, intravenous solutions (plain and with electrolytes and/or drugs), and any product designated by the FDA as a drug. This definition does not include oral or enteral nutrition solutions, or oxygen and other medical gases.

Medication Scheduling Terminology:

A. **Scheduled Medications** includes all maintenance doses administered according to standard administration times (See Appendix E) based on a repeated cycle of frequency for example, QID, TID, BID, daily, weekly, monthly, and annually (ISMP, 2011). The goal of standard medication administration times is to achieve and maintain therapeutic blood levels of the prescribed medications over a period of time.

B. **Time Critical Scheduled Medications** refers to medications where early or delayed administration of maintenance doses of greater than 30 minutes before or after the scheduled dosing time, for a total window not to exceed 1 hour, may cause harm or result in substantial sub-optimal therapy or pharmacological effect (ISMP, 2011). Examples of time critical scheduled medications including but not limited to the following:
   1. Antibiotics
   2. Anticoagulants
   3. Anticonvulsants
   4. Immunosuppressive agents
   5. Immunosuppressive agents used to prevent solid-organ transplant rejection or to treat myasthenia gravis.
   6. Pain medications (non-IV) (e.g., Scheduled opioids used for chronic pain management)
   7. Medications given more frequently than every 4 hours
   8. Medications that must be administered apart from other medications for optimal therapeutic effect (e.g., antacids and fluoroquinolones)
   9. Medications that require administration within a specified time interval related to meals (e.g., insulin)

C. **Non-time Critical Scheduled Medications** refers to medications where early or delayed administration within a specified range of either 1 or 2 hours should not cause harm or result in substantial sub-optimal therapy or pharmacological effect (ISMP, 2011).
   1. Medications prescribed more frequently than daily but no more frequently than every 4 hours may be administered within 1 hour before or after the scheduled doing time, for a total window that does not exceed 2 hours.
   2. Medications prescribed for daily, weekly or monthly administration may be within 2 hours before or after the scheduled dosing time, for a total window that does not exceed 4 hours.

D. **Medications Not Eligible for Scheduled Dosing Times:**
   The following is a list of medication orders or types of medications are not eligible for standard administration times.
1. STAT and Now doses
2. First doses and loading doses
3. One-time dose of a medication
4. Specifically timed doses based on existing protocols (e.g., antibiotics given before surgical incision)
5. On-call doses (e.g., pre-procedure sedation)
6. Time sequenced or concomitant medications (e.g., chemotherapy and rescue agents)
7. Drugs administered at specific times to ensure accurate peak/trough/serum drug levels
8. Investigational drugs in clinical trials
9. PRN or medications prescribed for use on an as needed basis

Patient Controlled Analgesia (PCA) is a method of pain control designed to allow the patient to administer pre-set doses of an analgesic (usually an opioid), on demand (American Pain Society, 2008). **PAIN MANAGEMENT USING OPIOIDS DELIVERED BY PATIENT CONTROLLED ANALGESIA PCA OR CONTINUOUS INFUSION**

Standard Medication Order: Components of a standard order for a drug or biological (CMS, 2014):

1. Name of the patient
2. Age and weight of the patient, if applicable for dose calculations (Weight is recorded in kilograms)
3. Date and time of the order
4. Drug name
5. Dose, frequency and route
6. Dose calculation requirements when applicable (e.g., chemotherapy, PCA opioid dose)
7. Exact strength or concentration, when applicable
8. Quantity and/or duration of the medication
9. Specific instructions for use, when applicable
10. Name of the prescriber

Waste Disposal: Disposal of pharmaceutical waste is governed by pharmacy guidelines. **Black Boxes** are provided for hazardous pharmaceutical waste including warfarin or warfarin packaging, nicotine patches or nicotine foil packaging, chloral hydrate, loose tablets/pills/capsules, open liquid container with drug, a vial/ampule/ or syringe containing liquid medication, or a partially emptied IV bag that contains a drug. IV bags that contain residual IV fluids with electrolytes only may be emptied into a drain. Empty containers, including IV/PCA/epidural bags, and vials/syringes without needles may be disposed of in the **general trash**, per pharmacy guidelines.

4. **POLICY**

4.1 Medications are administered in response to an order from a LIP, or on the basis of a standing order which is appropriately authenticated subsequently by the LIP.

4.2 Patient identification will be established prior to medication administration using approved patient identifiers (e.g., patient’s full name, an assigned identification number, and/or date of birth) in accordance with **PATIENT IDENTIFICATION** and by using BCMA.
4.3 Clinical personnel may administer medications based on state laws, licensure, scope of practice, and competency. (see Appendix A)

4.4 Caregivers may administer non-scheduled medications as directed by the LIP within their scope of practice, licensure (if applicable), and competency.

4.5 Clinical staff will ensure that medications are prepared and administered to their assigned patients and documented in compliance with statutory, regulatory, and organizational guidelines.

4.6 Medication orders are reviewed by a pharmacist prior to administration, unless given according to established, approved protocols or administered by the licensed prescriber.

4.7 Any questions or concerns about the medication (drugs or biologicals) including dose (too high or too low), route, timing of a medication, frequency of administration, or history of allergies must be resolved prior to preparing, dispensing, or administering the medication.

4.8 In general, dispensed medications are prepared by pharmacy or are commercially available unit dose products. If this is not feasible, there will be a designated area available in the patient care/clinic area for final medication preparation.

4.9 Standard medication administration times are used by caregivers to provide consistent medication scheduling during a patient’s episode of care in the inpatient setting unless an exception has been established or as requested by the ordering provider.

4.10 Clinical staff authorized to administer medications will be granted access to technology related to medication administration, including but not limited to, BCMA, AUBC, CPOE, and eMAR.

4.11 Clinical staff authorized to administer medications will consistently use technology related to medication administration, including but not limited to, BCMA, AUBC, CPOE, and eMAR unless otherwise directed (e.g., during a disaster).

4.12 Prior to administering a medication, caregivers will compare the medication with the medication administration record and verify the patient is receiving the right medication at the right dose via the right route and at the right time.

4.13 Caregivers will document the medications given after the actual administration has occurred, not prior to administration. Caregivers will document all medications administered during an episode of care on the eMAR creating a permanent record. If the eMAR is unavailable, documentation of medication administered is made on a print version of the medication administration record (MAR) and is retained per Aurora medical record documentation policies.

4.14 Caregivers will follow the guidelines for safe administration of high alert medications, which may include but is not limited to independent verification or specific patient monitoring (e.g., use of the Ramsey sedation scale) [HIGH ALERT MEDICATIONS]

4.15 Discipline specific training/education regarding medication administration will be addressed upon hire during orientation and periodically on an as needed basis. Education may include but is not limited to topics such as safe medication handling.
medication preparation, medication indications, side effects, drug interactions, compatibility, and dose limits, equipment or devices, special procedures, or techniques.

4.16 Disposal of medication related waste (e.g. discarded medications or medication containers) will follow established pharmacy policies.

5. PROCEDURES:

| CAREGIVERS AUTHORIZED TO ADMINISTER MEDICATIONS: APPENDIX A |
| GENERAL MEDICATION ADMINISTRATION PROCEDURES: APPENDIX B |
| ASSESSMENT AND MONITORING OF PATIENTS REceiving MEDICATIONS: APPENDIX C |
| PROCEDURAL INFORMATION RELATED TO USE OF AUBC: APPENDIX D |
| PROCEDURAL INFORMATION RELATED TO STANDARD MEDICATION ADMINISTRATION TIMES: APPENDIX E |

CROSS REFERENCES:

| ADMINISTRATION OF BLOOD AND BLOOD COMPONENTS |
| INFORMATION SECURITY-CAREGIVER REQUIREMENTS POLICY |
| PATIENT IDENTIFICATION |
| MEDICATION DISPENSING AUTOMATED DISPENSING CABINETS |
| Controlled Substances (Pharmacy S7.16) |
| HIGH ALERT MEDICATIONS |
| INCIDENT (PATIENT SAFETY EVENT) REPORTING/SENTINEL EVENT MANAGEMENT |
| PAIN MANAGEMENT |
| PAIN MANAGEMENT USING OPIOIDS DELIVERED BY PATIENT CONTROLLED ANALGESIA PCA OR CONTINUOUS INFUSION |
| IMMUNIZATION ADMINISTRATION |
| UNDERGRADUATE STUDENT NURSE |
| Medication Teaching (#2000) |
| ORDERS AND COMPUTERIZED PROVIDER ORDER ENTRY (CPOE) SYSTEM USE |
| NURSING ASSESSMENT AND REASSESSMENT INPATIENT AND HOSPITAL BASED DEPARTMENTS |
| Pediatric Medication Administration (new policy) |
| MINIMAL SEDATION (ANXIOLYSIS) |
| MODERATE SEDATION |
MEDICATION ADMINISTRATION AND USE OF TECHNOLOGY

DEEP SEDATION
MEDICATION BROUGHT INTO AN AURORA FACILITY FROM AND OUTSIDE SOURCE
Disposal of Pharmaceutical Waste (S7.07)
Nurse Extern Policy (In process)
Medication Self-Administration Program (Metro #424)
Self-Administration of Medication Program (AMC-S Policy)
Self-Administration of Medication Program (AMC-O Policy)

REFERENCES:


MEDICATION ADMINISTRATION AND USE OF TECHNOLOGY

REFERENCES:


PRIORITY REVIEW / REVISION DATES:
11/11, 4/12, 06/14, 9/14

11/30/2011