

the availability of emergency medications or reviewing public literature on the subject. Examples of strategies identified in the literature include the following:

- Use a strategy to differentiate between adult and pediatric medications; for example, using separate adult and pediatric carts or, when using a universal cart, storing the medications and equipment in separate adult and pediatric drawers.
- Keep a designated medication box for neonates in areas that care for neonates.
- Standardize cart and drawer layout throughout the hospital.

Measurable Elements of MMU.03.01

1. Emergency medications are immediately available in the patient care areas or are readily accessible within the hospital to meet emergency needs.
2. ⑩ The hospital establishes and implements a consistent and uniform written process for how emergency medications are stored; maintained; replaced when used, damaged, or out of date; and protected from loss or theft. (*See also* FMS.04.00, ME 2)
3. Access to emergency medications shall not require a specific individual or keys to unlock the emergency cart.
4. The hospital uses a risk-based approach to identify and implement strategies to improve the efficiency and accuracy of medication administration during emergency resuscitation. This approach at minimum includes the following:
 - Review of internal data from previous emergency situations to assess the availability of emergency medications (*See also* COP.04.00, ME 2)
 - Review of literature on the subject

Ordering and Transcribing

Standard MMU.04.00

The hospital identifies those qualified individuals permitted to prescribe or to order medications.

Intent of MMU.04.00

Each hospital is responsible for identifying those individuals with the requisite knowledge and experience and who are also permitted by licensure, certification, laws, or regulations to prescribe or to order medications. Selecting a medication to treat a patient requires specific knowledge and experience. A hospital may place limits on prescribing or ordering by an individual, such as for controlled substances, chemotherapy agents, or radioactive and investigational medications. Individuals permitted to prescribe and to order medications are known to the pharmaceutical service or others who dispense medications. In emergency situations, the hospital identifies any additional individuals permitted to prescribe or to order medications.

Measurable Elements of MMU.04.00

1. Only those permitted by the hospital and by relevant licensure, laws, and regulations prescribe or order medications. (*See also* COP.01.00, ME 1; IPSC.03.02, ME 1)
2. Individuals permitted to prescribe and to order medications are known to the pharmaceutical service or others who dispense medications.

Standard MMU.04.01

The hospital identifies safe prescribing, ordering, and transcribing practices and defines the elements of a complete order or prescription.

Intent of MMU.04.01

A common cause of adverse events in the hospital setting is medication errors. Strategies to reduce the variation in writing orders, such as defining required elements of a complete order or prescription, help reduce the risk of medication errors and improve patient safety. One recent study reported that “medication errors are most common at the ordering or prescribing stage. Typical errors include the health care practitioner writing the wrong medication, wrong route or dose, or the wrong frequency. These ordering errors account for almost 50% of medication errors.” In paper records, illegible medication prescriptions or orders are one cause of medication errors that jeopardize patient safety and may delay treatment. Strategies to reduce illegibility of written orders are important in reducing the risk of medication errors. Safe prescribing, ordering, and transcribing are guided by hospital policies and procedures. Medical, nursing, pharmacy, and administrative staff collaborate to develop and to monitor the policies and procedures. Relevant staff are trained in correct prescribing, ordering, and transcribing practices.

All orders and prescriptions contain the name of the drug, the dose and/or strength, and the frequency and route of administration. For example, it might be part of the medical history. Also, the following are examples of additional information that the prescription order should contain when appropriate:

- PRN (pro re nata, or “as needed”) orders: indications for use, detailed directions for overlapping orders (for example, more than one medication for pain)
- Weight-based or otherwise adjusted orders: for example, children, frail elderly, those with compromised renal function, oncology patients
- Adjusted for therapeutic range: for example, dosages may need to be updated based on laboratory values for specific medications, such as heparin infusions or phenytoin.

There are processes in place to manage medication orders. Thus, this standard sets hospitalwide expectations for medication orders. The processes are reflected in complete orders entered in the medical record, the pharmacy or dispensing unit receiving the information needed for dispensing, and the administration of the medication based on a complete order.

A diagnosis, condition, or indication for use must be present for each medication ordered. This information can be anywhere in the medical record and need not be on the order itself.

When managing titrated medication, the following information must be present in the titration orders: the medication name, medication route, initial rate of infusion (dose/unit of time), incremental units to which the rate or dose can be increased or decreased, how often the rate or dose can be changed, the maximum rate or dose of infusion, and the objective clinical measure to be used to guide changes. Examples of objective clinical measures to be used to guide titration changes include blood pressure measurement, weight-based heparin protocols, the Richmond Agitation–Sedation Scale (RASS) and the Critical-Care Pain Observation Tool (CPOT).

The hospital implements a policy that includes certain types of medication orders. The types are identified and listed as follows:

- As needed (PRN) orders: Orders acted on based on the occurrence of a specific indication or symptom
- Standing orders: A prewritten medication order with specific instructions from the physician or other licensed practitioner to administer a medication to a person in clearly defined circumstances
- Automatic stop orders: Orders that include a date or time to discontinue a medication
- Titration orders: Orders in which the dose is either progressively increased or decreased in response to the patient’s status
- Taper orders: Orders in which the dose is decreased by a particular amount with each dosing interval
- Range orders: Orders in which the dose or dosing interval varies over a prescribed range, depending on the situation or patient’s status

- Signed and held orders: New prewritten (held) medication orders and specific instructions from a physician or other licensed practitioner to administer medication(s) to a patient in clearly defined circumstances that become active upon the release of the orders on a specific date(s) and time(s)
- Orders for compounded drugs or drug mixtures not commercially available
- Orders for medication-related devices (for example, nebulizers, catheters)
- Orders for medications at discharge or transfer
- Orders for contrast medications

If applicable with the care, treatment, and services the hospital offers, these additional orders are included in the policy:

- Orders for investigational medications
- Orders for herbal products
- Orders for radiopharmaceuticals

Measurable Elements of MMU.04.01

1. ⑩ The hospital establishes, implements, and trains staff on a written process for the safe prescribing, ordering, and transcribing of medications in the hospital.
2. A diagnosis, condition, or indication for use exists for each medication ordered.
3. ⑩ All orders and prescriptions contain the following elements:
 - Name of the drug
 - Dose
 - Frequency
 - Route of administration

(See also IPSG.03.02, ME 1)
4. ⑩ Additional elements of complete medication orders or prescriptions include, at minimum, the following as appropriate to the order:
 - Data necessary to accurately identify the patient
 - When generic or brand names are acceptable or required
 - Specific guidelines for the use of PRN orders
 - Weight-based orders
 - Rates of administration for intravenous infusions
 - Special orders such as titrating, tapering, or range orders
 - Titration orders include the medication name, medication route, initial rate of infusion (dose/unit of time), incremental units to which the rate or dose can be increased or decreased, how often the rate or dose can be changed, the maximum rate or dose of infusion, and the objective clinical measure to be used to guide changes.

(See also IPSG.01.00, MEs 1 and 2; IPSG.03.02, ME 1)
5. ⑩ The hospital implements a written policy that includes the following types of medication orders:
 - As needed (PRN) orders
 - Standing orders
 - Automatic stop orders
 - Titrating orders
 - Taper orders
 - Range orders
 - Signed and held orders
 - Orders for compounded drugs or drug mixtures not commercially available
 - Orders for medication-related devices (for example, nebulizers, catheters)
 - Orders for investigational medications, if applicable
 - Orders for herbal products, if applicable
 - Orders for medications at discharge or transfer
6. ⑩ The hospital implements a written process to manage the following medication orders:
 - Incomplete, illegible, or unclear; including measures to prevent continued occurrence
 - Special types of orders, such as emergency, standing, or automatic stop, and any elements unique to such orders
 - Verbal, telephone, and text medication orders and the process to verify such orders (See also COP.01.00, ME 1)
7. Medications prescribed or ordered are documented in the patient's medical record or inserted into the patient's medical record at discharge or transfer.

Standard MMU.04.02

The hospital has a medication reconciliation process.