

content than handovers from the operating theatre to the intensive care unit; however, the handovers are standardized for the type of handover occurring.

Safe practices for effective communication include the following:

- Use of standardized, critical content and processes for communication between the patient, family, health care practitioner, and others involved in the patient's care during handovers of patient care
- Use of standardized methods, forms, or tools to facilitate consistent and complete handovers of patient care
- The handover process must allow for the participants to have an opportunity to clarify information during the handover process, by providing the opportunity to ask questions, or for discussion between the giver and the receiver of information. However, it is acceptable for the discussion to take place outside of in-person interactions, such as by phone, text, or other communication format.

Handover forms or tools, if used by the hospital, are not required to be part of the medical record. In addition, the detailed information communicated during the handover is not required to be documented in the medical record; however, the hospital may want to have documentation that the handover occurred. For example, the health care practitioner would record that they completed the handover and to whom they transferred responsibility for care, and then sign, date, and time the entry.

### Measurable Elements of IPSG.02.01

1. The hospital implements a standardized procedure to communicate critical information between health care practitioners during handovers of patient care.
2. The hospital uses standardized forms, tools, or methods that support a consistent and complete handover process that includes the opportunity for all staff involved to clarify information and ask questions.
3. © The hospital collects, analyzes, tracks, and trends data for patient safety events related to handovers.

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## Goal 3: Improve the Safety of Medications

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### Standard IPSG.03.00

The hospital implements a process to improve the safety of high-alert medications.

#### Intent of IPSG.03.00

High-alert medication errors can lead to patient injury or death and potentially additional costs associated with caring for these patients. The Institute for Safe Medication Practices (ISMP) defines *high-alert medications* as “drugs that bear a heightened risk of causing significant patient harm when they are used in error. Although mistakes may or may not be more common with these drugs, the consequences of an error are clearly more devastating to patients.” The most frequently cited examples of high-alert medications include the following:

- Insulin
- Opioids
- Chemotherapeutic agents
- Antithrombotic agents
- Anticoagulants
- Thrombolytics
- Medications with a narrow therapeutic range (for example, digitalis)
- Neuromuscular blocking agents
- Epidural or intrathecal medications

Examples of lists of high-alert medications are available from organizations such as ISMP and the World Health Organization (WHO). For safe management, the hospital needs to develop its own list(s) of high-alert medications based on the following:

- Its unique utilization patterns of medications
- Its own internal data about near misses (or close calls)
- Medication errors and sentinel events
- Safety issues published in professional literature

The list includes medications identified as high risk for adverse outcomes. Information from the literature and/or Ministry of Health may also help identify which medications should be included. This list is updated at least annually. The list may need to be updated more frequently if there are additions or changes to hospital services, patient populations, or new medications added to the hospital formulary that are deemed high risk.

Some high-alert medications/categories (such as neuromuscular blockade medication) have their own specific set of risks in addition to those that exist based on the high-alert category alone. Strategies to prevent harm should be based on the specific risk profile of that medication/category, in that case. Some high-alert medications may not require additional strategies in addition to the standardized strategies adopted by the hospital. The hospital must determine when a tailored strategy and standardized measures are needed. For example, neuromuscular blockade medications can be inadvertently retrieved from refrigerated storage when stored along with other refrigerated medications. An example of a strategy to mitigate this risk is to store neuromuscular blockade agents segregated from other medications, such as in lidded containers, with prominent warning labels on the container and the medications inside. Other examples are chemotherapy agents, due to the complexity of medication orders and protocols and due to the properties of some of these medications, such as those that can cause tissue necrosis when extravasation occurs. Examples of strategies for those medications include chemotherapy ordering protocols, use of central lines for administration, patient monitoring protocols during administration, and readily available extravasation kits.

A specific example of a high-alert medication best practice identified by ISMP relates to the dispensing of vincristine (and other vinca alkaloids) in a minibag of a compatible solution and not in a syringe. Significant adverse events resulting in severe neurological damage and often death have occurred from the inadvertent administration of vinca alkaloids via the intrathecal route. In organizations in which vinca alkaloids are dispensed in a minibag, there have been no reported cases of accidental administration of a vinca alkaloid by the intrathecal route. This best practice is supported by the following organizations:

- ISMP
- The Joint Commission and Joint Commission International
- World Health Organization (WHO)
- American Society of Clinical Oncology (ASCO)
- Oncology Nursing Society (ONS)
- National Comprehensive Cancer Network

However, the overall process for managing high-alert medications must still be standardized throughout the hospital, such as standard high-alert medication labeling and requiring a double-check process. The examples of additional tailored risk mitigation strategies should be *in addition* to the hospital's standardized process. Additional guidance for this is explained below. The hospital must educate clinical and technical staff handling high-risk medication on the standardized process, the risks related to each medication, and the risk mitigation strategies for each medication.

The hospital must develop a list of high-alert medications stocked and used in the hospital. The list of high-alert medications must meet the following criteria:

- Up to date
- Reviewed at least annually and when new medications are added to the formulary
- Known by clinical staff

- Accompanied by robust, well-developed risk reduction strategies that decrease the risk of errors and minimize harm

Strategies should be applicable to all hospital departments and services and sustainable over time. According to ISMP, examples of these include the following:

- Standardizing processes associated with ordering, storage, preparation, and administration of these medications
- Improving access to information about these drugs
- Limiting access to high-alert medications
- Using additional labels and automated alerts
- Building redundancies into the medication management process such as automated or independent double checks, fail-safe methods such as pumps with locking mechanisms, and reducing available options, such as limiting available concentrations of the same medication

The hospital's risk mitigation interventions must be evident in the overall medication management program and in the clinical areas where these medications are used. For example, IV heparin used in neonatal intensive care units may require different safety strategies than IV heparin in the emergency department, and this should be evident in those areas. However, general strategies such as special labels for high-alert medications and a double-check process must be standardized throughout the hospital to avoid confusion.

### Measurable Elements of IPSPG.03.00

1. © The hospital identifies, in writing, its list of high-alert medications. (*See also* MMU.02.00, ME 1)
2. The hospital implements a risk mitigation strategy for reducing the risk of harm from high-alert medications that is uniform throughout the hospital and, in addition, includes tailored strategies for specific medications when necessary.
3. The hospital reviews and, as necessary, revises its list of high-alert medications annually at minimum.

## Standard IPSPG.03.01

The hospital implements a process to improve the safety of look-alike/sound-alike medications.

### Intent of IPSPG.03.01

Medications that have similar product packaging or that have names that sound similar can easily be confused by health care practitioners and may lead to potentially harmful medication errors. Look-alike/sound-alike (LASA) names are medicine names that look or sound the same as other medicine names when written or spoken. Look-alike medicine packaging refers to medicine containers or primary packaging that looks like that of another medicine. There are many medication names that sound or look like other medication names. For example, *dopamine* and *dobutamine* sound alike, and the printed names may also look alike in some languages such as English. Confusing names are a common cause of medication errors throughout the world. The following factors contribute to this confusion:

- Incomplete knowledge of drug names
- Newly available products
- Similar packaging or labeling
- Similar clinical use
- Illegible prescriptions or misunderstanding during issuing of verbal orders

Hospitals must institute risk management strategies to avoid confusion with LASA medications and enhance patient safety. The hospital must determine which medications require safeguards to prevent LASA-related confusion that can cause errors. Strategies may include but are not limited to the following:

- Including the medication's purpose on the prescriptions
- Configuring safeguards in computerized medication ordering systems to require a minimum number of letters, such as at least five letters, when health care practitioners are searching for a medication