

# Joint Commission International (JCI) Standards

## International Patient Safety Goals (IPSGs)

### Purpose

The purpose of the International Patient Safety Goals in Joint Commission International (JCI) is to promote specific improvements in patient safety. The goals highlight problematic areas in health care and describe evidence- and expert-based consensus solutions to these problems.

### Goals and Standards according to 8<sup>th</sup> Edition

In the 7<sup>th</sup> edition, there are altogether six goals and standards for IPSGs. But in the 8<sup>th</sup> edition, there are only five goals and standards. The following is a list of all goals and standards of the 8<sup>th</sup> edition.

#### Goal 1: Identify Patients Correctly

**IPSG.01.00** The hospital implements a process to improve accuracy of patient identifications.

#### Goal 2: Improve Effective Communication

**IPSG.02.00** The hospital implements a process for reporting critical results of diagnostic tests.

**IPSG.02.01** The hospital implements a standardized process for handover communication.

### **Goal 3: Improve the Safety of Medications**

**IPSG.03.00** The hospital implements a process to improve the safety of high-alert medications.

**IPSG.03.01** The hospital implements a process to improve the safety of look-alike/sound-alike medications.

**IPSG.03.02** The hospital implements a process to manage the safe use of concentrated electrolytes.

### **Goal 4: Ensure Safe Surgery**

**IPSG.04.00** The hospital implements a process for the preoperative verification and surgical/invasive procedure site marking.

**IPSG.04.01** The hospital implements a process for the time-out that is performed immediately prior to the start of the surgical/invasive procedure and the sign-out that is conducted after the procedure.

### **Goal 5: Reduce the Risk of Health Care–Associated Infections**

**IPSG.05.00** The hospital implements evidence-based hand-hygiene guidelines to reduce the risk of healthcare–associated infections.

## **Goal 1 – Identify Patients Correctly**

**Standard IPSG.01.00 The hospital implements a process to improve accuracy of patient identifications.**

Incorrect patient identification can result in wrong-person and wrong-procedure errors, treatment errors, medication errors, diagnostic errors, and more that may result in patient harm. Correctly identifying a patient and matching them with intended treatment and services must be performed in all care settings. The identification process used throughout the hospital requires two patient identifiers, such as the patient's name, identification number, birth date, a bar-coded wristband, or other ways. The patient's room number or location in the hospital, or other numbers such as incubator numbers for neonates, cannot be used for identification. It is a best practice that the patient be involved in the identification process to whatever extent possible.

## **Goal 2: Improve Effective Communication**

**IPSG.02.00 The hospital implements a process for reporting critical results of diagnostic tests.**

Patient harm can result when critical results of diagnostic tests are not reported and acted on promptly. A critical result is defined as a variance from normal range that represents a pathophysiologic state that is high risk or life-threatening, is considered urgent or emergent, and in which immediate medical action is likely necessary to preserve life or prevent a catastrophic event.

This standard and its measurable elements are concerned with critical test results (outcomes) from any diagnostic test, and these critical result parameters and the response to them must be established by the hospital. For example, the hospital may define a critical result for potassium levels as being below 2.5 mmol/L or above 6.0 mmol/L, indicating potentially life-threatening hypokalemia or hyperkalemia.

Diagnostic tests include all tests, such as laboratory, imaging, and cardiac diagnostics. Critical results may also be produced from any diagnostic tests performed at the bedside, such as point-of-care blood testing, portable imaging, and 12-lead electrocardiograms.

A formal reporting system is used throughout the hospital that clearly identifies how critical results of diagnostic tests are communicated to health care practitioners and how the information is documented and acted on. This should include closed-loop communication by a read-back between the reporter and the receiver. The objective is to provide the critical results within an established time frame so that the responsible licensed health care provider can evaluate its significance and act on the results within a defined time frame.

**IPSG.02.01 The hospital implements a standardized process for handover communication.**

Breakdowns in communication can occur during any handover of patient care and can result in patient safety events. Handover communications can also be referred to as handoff communications.

Standardized forms, tools, or methods support a consistent and complete handover process. The content of the handover communication and the form, tool, or method used are standardized for the type of handover.

The handover process may be different for different types of handovers within the hospital. For example, handovers of patient care for the emergency department to a medical ward may require a different process or different content than handovers from the operating theatre to the intensive care unit; however, the handovers are standardized for the type of handover occurring.

Handovers of patient care within a hospital occur in the following ways:

- Between health care practitioners (for example, physician to physician, physician to nurse, nurse to nurse)
- Between different levels of care in the same hospital (for example, when the patient is moved from an intensive care unit to a medical unit or from an emergency department to the operating theatre)
- From inpatient units to diagnostic or other treatment departments, such as radiology or physical therapy
- Between staff and patients/families, such as at discharge

**Tools/Methods to Use (Examples):**

- SBAR Tool** – Situation, Background, Assessment, Recommendation
- Handover Checklist** – Patient information, medications, procedures
- Standardized Handover Forms** – Using a consistent form format
- Verbal + Written Handover** – Presenting verbally while also documenting in writing

These kinds of tools should be used to ensure smooth and effective communication.

## Goal 3: Improve the Safety of Medications

**Standard IPSG.03.00. The hospital implements a process to improve the safety of high-alert medications.**

High-alert medication errors can lead to patient injury or death and potentially additional costs associated with caring for these 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 the Institute for Safe Medication Practices 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

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 hospital must educate clinical and technical staff handling high-risk 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.

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

**Standard IPSG.03.01. The hospital implements a process to improve the safety of look-alike/sound-alike medications.**

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.

Hospitals must institute risk management strategies to avoid confusion with LASA medications and enhance patient safety. Strategies may include but are not limited to the following:

- Including the medication's purpose on the prescriptions

- Changing the appearance of look-alike medication names (for example, using “TALLman lettering” on labels such as DOBUTamine and DOPamine or oxyBUTYnin and oxyCONTIN)
- 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
- Configuration of computer selection screens and drop-down menus in prescription systems to prevent LASA names from appearing adjacent to each other
- Automated dispensing by means of electronic devices and serialization technology
- Use of a closed-loop system with barcode technology to enhance the readability of look-alike labels
- Consideration of potential LASA errors when reordering stock or making purchasing decisions

The hospital must educate clinical and technical staff handling LASA medications on the standardized process, the risks related to each medication, and the risk mitigation strategies for each medication.

**Standard IPSC.03.02. The hospital implements a process to manage the safe use of concentrated electrolytes.**

Concentrated electrolytes are vials of concentrated forms of electrolytes that require dilution or other preparation before IV administration. Concentrated electrolytes include but are not limited to the following:

- Potassium chloride
- Potassium phosphate
- Sodium chloride
- Magnesium sulfate

The hospital can use labeling practices to decrease the risk of inadvertent administration of concentrated electrolytes, when it is possible for a single vial to be removed or transported from an open bin, box, or container. The individual vial must be labeled in addition to the storage container. Only qualified and trained individuals should have access to these vials.

## Goal 4: Ensure Safe Surgery Standard

**IPSG.04.00. The hospital implements a process for the preoperative verification and surgical/invasive procedure site marking.**

Wrong-patient, wrong-site, and wrong-procedure surgery present a risk for significant patient safety events that result in patient injury. The following are common risk factors for these surgery events:

- Lack of a standardized process for marking the procedure site
  - Use of ambiguous site marks, such as “X” (which could be interpreted as “do not operate here” instead of marking the operative site)
  - Use of materials or media that can easily be removed, such as tape, or ink that washes off during the skin preparation process
  - Lack of patient involvement in the site marking
  - Inadequate patient assessment
  - Inadequate medical record review
  - A culture that does not support open communication among team members
  - Problems related to illegible handwriting
  - Use of abbreviations
- Surgical and invasive procedures include all procedures

The essential elements of the Universal Protocol are the preoperative verification process, marking the surgical site, and the time-out that is held immediately before the start of the procedure.

## **Preoperative Verification Process**

Preoperative verification is an ongoing process of information gathering and confirmation.

The purpose of the preoperative verification process is to do the following:

- Verify the correct patient, procedure, and site.
- Ensure that all relevant documents, images, and studies are available, properly labeled, and displayed.
- Verify that any required blood products, special medical equipment, and/or implants are present.

## **Marking the Site**

Marking the surgical/invasive site involves the patient and is done with an instantly recognizable and unambiguous mark. Ideally, an “X” is not used as the mark, as it may be interpreted as “not here” or “wrong side” and could potentially lead to errors in patient care, nor should other ambiguous marks such as a line or a dot be used. The mark must be consistent throughout the hospital.

The practitioner performing the invasive procedure must be the one who marks the site. The site marking may take place any time before the surgical/invasive procedure begins, as long as the patient is actively involved in the site marking whenever possible and the mark is visible after the patient is prepped and draped. Examples of when patient participation may not be possible include the following:

- Patients who are not competent to make health care decisions
- Children
- Patients requiring emergent surgery

The hospital has an alternative procedure for identifying the correct site in the above cases in which patient participation is not possible or when a patient refuses site marking, and this should be outlined in policies and procedures. The site mark must be located where it will be visible after draping of the surgical site, so that it can be verified during the final time-out.

**Standard IPSC.04.01. The hospital implements a process for the time-out that is performed immediately prior to the start of the surgical/invasive procedure and the sign-out that is conducted after the procedure.**

The time-out allows any unanswered questions or confusion to be resolved and provides a final opportunity to identify potential errors such as wrong-site surgery, surgery on the wrong patient, or the wrong surgical procedure on the right patient. The time-out requirement is based on the following principles:

- Wrong-person, wrong-site, and wrong-procedure surgery can and must be prevented.
- A robust approach using multiple, complementary strategies is necessary to achieve the goal of always conducting the correct procedure on the correct person, at the correct site.
- Active involvement and use of effective methods to improve communication among all members of the procedure team are important for success.
- To the extent possible, the patient and, as needed, the family are involved in the process.
- Consistent implementation of a standardized protocol is most effective in achieving safety.

The three components of the Universal Protocol are preprocedural verification, site marking, and the time-out procedures. All should be as consistent as possible throughout the hospital.

## **Time-Out**

The time-out is held immediately before the start of the procedure with all team members present. During the time-out, the team agrees on the following components:

- Correct patient identity
- Correct procedure to be done
- Correct surgical/invasive procedure site

The time-out is conducted in the location at which the procedure will be done when the patient is present and involves the active participation of the entire team. The patient does not have to participate in the time-out. Completion of the time-out is documented and includes the date and time the time-out was completed.

## **Sign-Out**

The WHO Surgical Safety Checklist includes a sign-out process, which is conducted in the area where the procedure was performed before the patient leaves.

The following components of the sign-out are verbally confirmed by a member of the team, typically a nurse:

- Name of the surgical/invasive procedure that was recorded/written
- Completion of instrument, sponge, and needle counts (as applicable)
- Labeling of specimens (when specimens are present during the sign-out process, labels are read aloud, including patient name)
- Any equipment problems to be addressed (as applicable)
- What went well, and any problems noted, with follow-up interventions through quality improvement activities as necessary

## **Goal 5: Reduce the Risk of Health Care–Associated Infections Standard**

**IPSG.05.00. The hospital implements evidence-based hand-hygiene guidelines to reduce the risk of health care–associated infections.**

The hospital must adopt and implement current evidence-based hand-hygiene guidelines. This includes efforts to standardize hand hygiene compliance data collection and ensure that the data are valid, such as trained observers. Resources from WHO and CDC include resources for training hand hygiene observers. Hand- hygiene guidelines should be posted in appropriate areas, and staff should be educated in proper handwashing and hand-disinfection procedures. Soap, running water, disinfectants, and single-use towels are in areas where handwashing and hand-disinfecting procedures are required. Air dryers are not used to dry hands in patient care areas.



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