

Patient Safety Indicators

A tool to help identify potentially preventable complications for patients in hospitals.

What are the Patient Safety Indicators?

The Patient Safety Indicators (PSIs) are a set of measures that screen for adverse events that patients experience as a result of exposure to the health care system. These events are likely amenable to prevention by changes at the system or provider level.

PSIs are defined on two levels: the provider level and the area level.

Provider-level indicators provide a measure of the potentially preventable complication for patients who received their initial care and the complication of care within the same hospitalization. Provider-level indicators include only those cases where a secondary diagnosis code flags a potentially preventable complication.

- **Accidental Puncture or Laceration**
- **Birth Trauma – Injury to Neonate**
- **Complications of Anesthesia**
- **Death in Low-Mortality DRGs**
- **Decubitus Ulcer**
- **Failure to Rescue**
- **Foreign Body Left During Procedure**
- **Iatrogenic Pneumothorax**
- **Obstetric Trauma – Vaginal with Instrument**
- **Obstetric Trauma – Vaginal without Instrument**
- **Obstetric Trauma – Cesarean Delivery**
- **Postoperative Hip Fracture**
- **Postoperative Hemorrhage or Hematoma**

- **Postoperative Physiologic and Metabolic Derangements**
- **Postoperative Respiratory Failure**
- **Postoperative Pulmonary Embolism or Deep Vein Thrombosis**
- **Postoperative Sepsis**
- **Postoperative Wound Dehiscence**
- **Selected Infections Due to Medical Care**
- **Transfusion Reaction**

Area-level indicators capture all cases of the potentially preventable complication that occur in a given area (e.g., metropolitan area or county) either during hospitalization or resulting in subsequent hospitalization. Area-level indicators are specified to include principal diagnosis, as well as secondary diagnoses, for the complications of care. This specification adds cases where a patient's risk of the complication occurred in a separate hospitalization.

- **Accidental Puncture or Laceration**
- **Foreign Body Left During Procedure**
- **Iatrogenic Pneumothorax**
- **Postoperative Hemorrhage or Hematoma**
- **Postoperative Wound Dehiscence**
- **Selected Infections Due to Medical Care**
- **Transfusion Reaction**

A detailed *Guide to Patient Safety Indicators*, software, and software documentation are available on the AHRQ Quality Indicators web site: http://qualityindicators.ahrq.gov/psi_download.htm.

How can the PSIs be used to improve patient safety?

Widespread consensus exists that health care organizations can reduce patient injuries by improving the environment for safety—from implementing technical changes, such as electronic medical record systems, to improving staff awareness of patient safety risks. Clinical process interventions also have strong evidence for reducing the risk of adverse events related to a patient's exposure to hospital care. PSIs can be used to better prioritize and evaluate local and national initiatives. Some potential actions include the following:

- Review and synthesize the evidence base and best practices from scientific literature.
- Work with the multiple disciplines and departments involved in care of surgical patients to redesign care based on best practices with an emphasis on coordination and collaboration.
- Evaluate information technology solutions.
- Implement performance measurements for improvement and accountability.