

Agency for Healthcare Research and Quality (AHRQ) Indicators

IQIs- Mortality Inpatient Procedures (8 Indicators)	Measure on FloridaCompareCare
Esophageal resection (IQI 8)	Yes
Pancreatic resection (IQI 9)	Yes
Abdominal aortic aneurysm repair (IQI 11)	Yes
Coronary artery bypass graft (IQI 12)	Yes
Percutaneous transluminal coronary angioplasty (IQI 30)	No
Carotid endarterectomy (IQI 31)	No
Craniotomy (IQI 13)	Yes
Hip replacement (IQI 14)	Yes
IQIs- Mortality Inpatient Conditions (7 Indicators)	Measure on FloridaCompareCare
Acute myocardial infarction (AMI) (IQI 15)	Yes
AMI, Without Transfer Cases (IQI 32)	Yes
Congestive heart failure (IQI 16)	Yes
Stroke (IQI 17)	Yes
Gastrointestinal hemorrhage (IQI 18)	Yes
Hip fracture (IQI 19)	Yes
Pneumonia (IQI 20)	Yes
IQIs- Volume of Inpatient Procedures (6 Indicators)	Measure on FloridaCompareCare
Esophageal resection (IQI 1)	Yes
Pancreatic resection (IQI 2)	Yes
Abdominal aortic aneurysm repair (IQI 4)	Yes
Coronary artery bypass graft (IQI 5)	Yes
Percutaneous transluminal coronary angioplasty (IQI 6)	No
Carotid endarterectomy (IQI 7)	No
Patient Safety Indicators (20 Indicators)	Measure on FloridaCompareCare
Complications of anesthesia (PSI 1)	No
Death in low mortality DRGs (PSI 2)	No
Decubitus ulcer (PSI 3)*	Yes
Failure to rescue (PSI 4)	No
Foreign body left in during procedure (PSI 5)	No
Iatrogenic pneumothorax (PSI 6)*	Yes
Selected infections due to medical care (PSI 7)*	Yes
Postoperative hip fracture (PSI 8)*	Yes
Postoperative hemorrhage or hematoma (PSI 9)	No
Postoperative physiologic and metabolic derangements (PSI 10)	No
Postoperative respiratory failure (PSI 11)	No
Postoperative pulmonary embolism or deep vein thrombosis (PSI 12)*	Yes
Postoperative sepsis (PSI 13)	Yes
Postoperative wound dehiscence in abdominopelvic surgical patients (PSI 14)	No
Accidental puncture and laceration (PSI 15)	No
Transfusion reaction (PSI 16)	No
Birth trauma -- injury to neonate (PSI 17)	No
Obstetric trauma -- vaginal delivery with instrument (PSI 18)	No
Obstetric trauma -- vaginal delivery without instrument (PSI 19)	No
Obstetric trauma -- cesarean delivery (PSI 20)	No
* Included in the Complication Index	Yes
Pediatric Quality Indicators (13 Indicators)- Provider Level Pediatric Indicators	Measure on FloridaCompareCare
Accidental Puncture or Laceration (PDI 1)	No
Decubitus Ulcer (PDI 2)	No
Foreign Body Left During Procedure (PDI 3)	No
Iatrogenic Pneumothorax in Neonates at Risk (PDI 4)	No
Iatrogenic Pneumothorax in Non-neonates (PDI 5)	No
Pediatric Heart Surgery Mortality (PDI 6)	No
Pediatric Heart Surgery Volume (PDI 7)	No
Postoperative Hemorrhage or Hematoma (PDI 8)	No
Postoperative Respiratory Failure (PDI 9)	No
Postoperative Sepsis (PDI 10)	No
Postoperative Wound Dehiscence (PDI 11)	No
Selected Infections Due to Medical Care (PDI 12)	No
Transfusion Reaction (PDI 13)	No
Pediatric Quality Indicators (5 Indicators)- Area Level Pediatric Indicators	Measure on FloridaCompareCare
Asthma Admission Rate (PDI 14)	No
Diabetes Short-Term Complication Rate (PDI 15)	No
Gastroenteritis Admission Rate (PDI 16)	No
Perforated Appendix Admission Rate (PDI 17)	No
Urinary Tract Infection Admission Rate (PDI 18)	No

Inpatient Quality Indicators

A tool to help assess quality of care in hospitals.

What are the Inpatient Quality Indicators?

The Inpatient Quality Indicators (IQIs) are a set of measures that can be used with hospital inpatient discharge data to provide a perspective on quality.

Provider-level volume indicators are proxy, or indirect, measures of quality. They are based on evidence suggesting that hospitals performing more of certain intensive, high-technology, or highly complex procedures may have better outcomes for those procedures. Volume indicators simply represent counts of admissions in which these procedures were performed:

- **Abdominal Aortic Aneurysm (AAA) Repair Volume**
- **Carotid Endarterectomy (CEA) Volume**
- **Coronary Artery Bypass Graft (CABG) Volume**
- **Esophageal Resection Volume**
- **Pancreatic Resection Volume**
- **Percutaneous Transluminal Coronary Angioplasty (PTCA) Volume**

Mortality indicators for inpatient procedures include procedures for which mortality has been shown to vary across institutions and for which there is evidence that high mortality may be associated with poorer quality of care:

- **AAA Repair Mortality Rate**
- **Esophageal Resection Mortality Rate**
- **CABG Mortality Rate**
- **CEA Mortality Rate**
- **Craniotomy Mortality Rate**
- **Pancreatic Resection Mortality Rate**
- **Hip Replacement Mortality Rate**
- **PTCA Mortality Rate**

Mortality indicators for inpatient conditions include conditions for which mortality has been shown to vary substantially across institutions and for which evidence

How can the IQIs be used in quality assessment?

Although quality assessments based on administrative data cannot be definitive, they can be used to flag potential quality problems and success stories, which can then be further investigated and studied. Hospital associations, individual hospitals, purchasers, regulators, and policymakers at the local, State, and Federal levels can use readily available hospital administrative data to begin the assessment of quality of care. Guidance on alternative uses of the AHRQ QIs is summarized in *Guidance for Using the AHRQ Quality Indicators for Hospital-Level Public Reporting or Payment* and in the *AHRQ Summary Statement on Comparative Hospital Public Reporting*, available at <http://www.qualityindicators.ahrq.gov/documentation.htm>.

suggests that high mortality may be associated with deficiencies in the quality of care.

- **Acute Myocardial Infarction (AMI) Mortality Rate**
- **AMI Mortality Rate, Without Transfer Cases**
- **Congestive Heart Failure (CHF) Mortality Rate**
- **Acute Stroke Mortality Rate**
- **Gastrointestinal Hemorrhage Mortality Rate**
- **Hip Fracture Mortality Rate**
- **Pneumonia Mortality Rate**

Utilization indicators examine procedures whose use varies significantly across hospitals and for which questions have been raised about overuse, underuse, or misuse.

- **Bilateral Cardiac Catheterization Rate**
- **Cesarean Delivery Rate**
- **Incidental Appendectomy In The Elderly Rate**
- **Laparoscopic Cholecystectomy Rate**
- **Primary Cesarean Delivery Rate**
- **Vaginal Birth After Cesarean (VBAC) Rate**
- **VBAC Rate, Uncomplicated**

Area-level utilization indicators reflect the rate of hospitalization in the area for specific procedures. They are designed using an age- and sex-adjusted population-based denominator and discharge-based numerator. These indicators represent procedures whose use varies widely across relatively similar geographic areas with (in many cases) substantial inappropriate use.

- **CABG Area Rate**
- **Hysterectomy Area Rate**
- **Laminectomy Or Spinal Fusion Area Rate**
- **PTCA Area Rate**

A detailed *Guide to Inpatient Quality Indicators*, software, and software documentation are available on the AHRQ Quality Indicators web site:

http://qualityindicators.ahrq.gov/iqi_download.htm.

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.

Pediatric Quality Indicators Overview

The Pediatric Quality Indicators (PDIs) are a set of measures that can be used with hospital inpatient discharge data to provide a perspective on the quality of pediatric healthcare. Specifically, PDIs screen for problems that pediatric patients experience as a result of exposure to the healthcare system and that may be amenable to prevention by changes at the system or provider level.

Development of quality indicators for the pediatric population involves many of the same challenges associated with the development of quality indicators for the adult population. These challenges include the need to carefully define indicators using administrative data, establish validity and reliability, detect bias and design appropriate risk adjustment, and overcome challenges of implementation and use. However, the special population of children invokes additional, special challenges. Four factors—differential epidemiology of child healthcare relative to adult healthcare, dependency, demographics, and development—can pervade all aspects of children's healthcare; simply applying adult indicators to younger age ranges is insufficient

This PDIs focus on potentially preventable complications and iatrogenic events for pediatric patients treated in hospitals, and on preventable hospitalizations among pediatric patients.

The Pediatric Quality Indicators are a part of Agency Healthcare Research and Quality (AHRQ) Quality Indicators (QIs) developed by investigators at Stanford University and the University of California under a contract with AHRQ.

The PDIs are a software tool distributed free by AHRQ. The software can be used to help hospitals identify potential adverse events that might need further study. The PDI software programs can be applied to any hospital inpatient administrative data. These data are readily available and relatively inexpensive to use.

The PDIs are the fourth in a four-part set of AHRQ Quality Indicators (QIs).

PDI facts

Pediatric Quality Indicators:

- Apply to the special characteristics of the pediatric population.
- Screen for problems that pediatric patients experience as a result of exposure to the healthcare system and that may be amenable to prevention by changes at the provider level or area level.
- Help to evaluate preventive care for children in an outpatient setting, and most children are rarely hospitalized.
- Are free and publicly available.
- Are available for download.

The PDIs provide a perspective on patient safety events using hospital administrative data, which are readily available and relatively inexpensive to use.

The PDIs include 13 Provider-level and 5 Area-level Indicators.

Provider-level Pediatric Quality Indicators (13 Indicators)

- Accidental Puncture or Laceration (PDI 1)
- Decubitus Ulcer (PDI 2)
- Foreign Body Left During Procedure (PDI 3)
- Iatrogenic Pneumothorax in Neonates at Risk (PDI 4)
- Iatrogenic Pneumothorax in Non-neonates (PDI 5)
- Pediatric Heart Surgery Mortality (PDI 6)
- Pediatric Heart Surgery Volume (PDI 7)
- Postoperative Hemorrhage or Hematoma (PDI 8)
- Postoperative Respiratory Failure (PDI 9)
- Postoperative Sepsis (PDI 10)
- Postoperative Wound Dehiscence (PDI 11)
- Selected Infections Due to Medical Care (PDI 12)
- Transfusion Reaction (PDI 13)

Area-level Pediatric Quality Indicators (5 Indicators)

- Asthma Admission Rate (PDI 14)
- Diabetes Short-Term Complication Rate (PDI 15)
- Gastroenteritis Admission Rate (PDI 16)
- Perforated Appendix Admission Rate (PDI 17)
- Urinary Tract Infection Admission Rate (PDI 18)