

Fact Sheet on Inpatient Quality Indicators

What Are the Inpatient Quality Indicators?

The Inpatient Quality Indicators (IQIs) are a set of 28 provider-level measures developed by the Agency for Healthcare Research and Quality (AHRQ) that use hospital administrative data to provide a perspective on hospital quality of care for patients 18 years and older. These indicators reflect quality of care inside hospitals (or geographic regions) and include **volume** of procedures for which there is some evidence that a higher volume of procedures is associated with lower mortality. They also include inpatient **mortality** for certain procedures, **mortality** for certain medical conditions, and **utilization** of procedures for which there are questions of overuse, underuse, and misuse.

The IQI module includes two composite indicators intended to provide a summary of overall hospital mortality, minimizing the impact of limited information from individual IQIs from low-volume centers and theoretically allowing better discrimination among hospitals. One of the composite indicators encompasses eight different procedures, while the other encompasses six different conditions.

The IQIs can be used to help hospitals identify potential problem areas that may need further study. They also help assess quality of care inside the hospital using administrative data found in the typical discharge record. IQIs include mortality indicators for conditions or procedures for which mortality can vary by hospital; utilization indicators for procedures for which utilization varies across hospitals or geographic areas; and volume indicators for procedures for which outcomes may be related to the volume of those procedures performed.

A Snapshot of the Indicators

The current provider-level IQIs are listed in Table 1, along with information on their annual rates and status regarding endorsement by the National Quality Forum (NQF).

A detailed list of indicator specifications, software for calculating the measures, and software documentation are available on the AHRQ Quality Indicators Web site:

www.qualityindicators.ahrq.gov.

Table 1. The 2015 AHRQ Provider-Level Inpatient Quality Indicators (IQIs), With 2012 Rates and National Quality Forum Endorsement Status

IQI Indicator	Rate per 1,000	NQF Endorsement	
		NQF Nbr	Most Recent Year
Volume Indicators			
IQI 01 Esophageal Resection Volume	N/A*	0361	2011
IQI 02 Pancreatic Resection Volume	N/A*	0366	2012
IQI 04 Abdominal Aortic Aneurysm (AAA) Repair Volume	N/A*	0357	2012
IQI 05 Coronary Artery Bypass Graft (CABG) Volume	N/A*		
IQI 06 Percutaneous Coronary Intervention (PCI) Volume	N/A*		
IQI 07 Carotid Endarterectomy (CEA) Volume	N/A*		

IQI Indicator	Rate per 1,000	NQF Endorsement	
		NQF Nbr	Most Recent Year
Mortality Rates for Procedures			
IQI 08 Esophageal Resection Mortality Rate	39.89	0360	2011
IQI 09 Pancreatic Resection Mortality Rate	29.42	0365	2012
IQI 11 AAA repair Mortality Rate	35.90	0359	2012
IQI 12 CABG Mortality Rate	25.20		
IQI 13 Craniotomy Mortality Rate	58.77		
IQI 14 Hip Replacement Mortality Rate	0.66		
IQI 30 PCI Mortality Rate (not used in public reporting)	21.08		
IQI 31 CEA Mortality Rate (not used in public reporting)	4.40		
IQI 90 Mortality for Selected Procedures	**		
Mortality Rates for Medical Conditions			
IQI 15 Acute Myocardial Infarction (AMI) Mortality Rate	56.49	0730	2011
IQI 32 AMI Mortality Rate, without transfer cases	58.69		
IQI 16 Heart Failure (CHF) Mortality Rate	30.68	0358	2012
IQI 17 Acute Stroke Mortality Rate	82.53	0467	2012
IQI 18 Gastrointestinal Hemorrhage Mortality Rate	22.31	2065	2013
IQI 19 Hip Fracture Mortality Rate	25.30	0354	2008
IQI 20 Pneumonia Mortality Rate	35.05	0231	2009
IQI 90 Mortality for Selected Procedures	***	0530	
Utilization Rates			
IQI 21 Cesarean delivery, uncomplicated	302.54		
IQI 33 Primary cesarean delivery, uncomplicated	179.46		
IQI 22 Vaginal birth after cesarean (VBAC), uncomplicated	100.62		
IQI 34 VBAC, all	99.77		
IQI 23 Laparoscopic cholecystectomy	866.45		
IQI 24 Incidental appendectomy in the elderly	10.81		
IQI 25 Bilateral cardiac catheterization	12.42	0355	2012

*NA: Not applicable; measure is based on the volume of events.

**Indicates a composite score.

Based on AHRQ QI software version 5.0 for ICD-9 as of March, 2015; 2012 is the most recent version of HCUP available at time of toolkit publication.

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), State Inpatient Databases (SID), 2012. AHRQ Quality Indicators (QIs) Inpatient Quality Indicators (IQI) Benchmark Data Tables. Available at http://www.qualityindicators.ahrq.gov/Modules/iqi_resources.aspx.

AHRQ Quality Indicators Software

AHRQ provides free software—in both SAS[®] and Windows—for organizations to apply the IQIs to their own data to assist quality improvement efforts in acute care hospital settings. The software contains all the AHRQ QI modules, including the IQIs.

In October 2015, the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) used to report medical diagnoses and inpatient procedures was officially replaced by the International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM). This transition affected diagnosis and inpatient procedure coding across the United States. As of spring 2016, AHRQ has updated the QI software (v6.0) to

account for the change to ICD-10. Because hospitals have just begun coding with ICD-10 codes, there are no available national data that allow hospitals to compare their measures to national benchmarks; however, future versions of the software will calculate risk-adjusted measures. Future versions of the software will also include the IQI composites.