Introduction to AHRQ Quality Indicators: Hospitals & Health Systems

October 20, 2015

Announcements

- The webinar will be recorded and will be available on the AHRQ QI website for future use.

- All participant lines will remain in listen-only mode.

- You may submit webinar questions via the *question* feature at any time, however questions will be answered only during the Q&A session. Your questions will only be visible to the moderators.

- If multiple people from your organization are dialing in from the same location, please use only one line.

- For technical difficulties, please contact Erin Johnson at ejohnson@air.org or 202-403-6881.

Learning Objectives

- Propose opportunities to use AHRQ QIs in your organization

- Match features of the AHRQ QIs with broader organization goals

- Identify resources available to support use of the AHRQ QIs

Agenda

1. Welcome and Introductions

2. Overview of the AHRQ Quality Indicators (QIs)

3. Using the QIs: Examples of Impact on Hospitals and Quality of Care

4. Advantages, limitations and updates to the AHRQ QIs

5. Implementation Guidance and Resources

6. Q&A

Today's Speakers

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Does this sound familiar?

We need to improve patient safety in our hospital.

How do I know what area to focus on?

How are we even doing? Are we one of the good ones? Or are we lagging?

How will we know when we've gotten better? How do we quantify something like safety?

Where do we begin?

OVERVIEW OF THE AHRQ QUALITY INDICATORS

What are the AHRQ QIs?

Free Software Program

SAS

Windows

Evidence-based measures

Use hospital claims data

Standardized

Improve care quality

Performance improvement

P4P, Public reporting

Many NQF endorsed

Software available at: http://www.qualityindicators.ahrq.gov/Software/Default.aspx

The AHRQ QI Modules

Module:	What the module reflects:	Examples:
Patient Safety Indicators (PSIs)	Quality of hospital care for adults Focus on potentially avoidable complications and errors that occur during a hospital inpatient stay	Pressure ulcers Postoperative sepsis
Inpatient Quality Indicators (IQIs)	Quality of hospital care for adults • Inpatient mortality for medical conditions • Inpatient mortality for surgical procedures • Utilization of procedures for which there are questions of overuse, underuse, or misuse • Volume of procedures with evidence that higher hospital volume of procedures may be associated with lower mortality	Pneumonia mortality Bilateral cardiac catheterization
Prevention Quality Indicators (PQIs)	Hospitalization for ambulatory care sensitive conditions that reflect access to and quality of outpatient care	Asthma Low birth weight
Pediatric Quality Indicators (PDIs) Includes neonatal development indicators, NQIs	Quality of hospital care for children 18 years and younger and neonates (NQIs) • Potential complications and errors resulting from a hospital admission for children and adolescents • Potentially avoidable hospitalizations among children	Neonatal mortality Postop. sepsis

Example QI Rates

National Benchmark Rates, 2012 (v5.0), Selected Qis

QI #	Indicator	Observed Rate (per 1000 discharges)*
IQI 12	Coronary Artery Bypass Graft (CABG) Mortality Rate	25.20
IQI 14	Hip Replacement Mortality Rate	0.66
PSI 03	Pressure Ulcer Rate	0.50
PSI 13	Postoperative Sepsis Rate	9.61
PDI 09	Postoperative Respiratory Failure Rate (pediatric)	14.52
PQI15	Asthma in Younger Adults Admissions Rate	46.02 per 100,000 pop.

*Area-level QIs are reported per 100,000 county population

Source: Benchmark Data Tables, by module, here: http://www.qualityindicators.ahrq.gov/Default.aspx

AHRQ QIs IN ACTION:
Quality Improvement Examples

Real-time Patient Safety Monitoring at Cleveland Clinic

- **Goal:** Improve patient safety through implementation of PSIs

- **Background:** In 2010, Cleveland Clinic chose to implement the PSIs because of the focus placed on these measures by federal and private payers in reimbursement programs.

- **Baseline Performance:** lowest quartile compared with their peer institutions, indicating room for improvement

- **Implementation:**
  - ► Addressed accuracy of coding
  - ► Now flags PSIs in real time using 3M's 360 Encompass platform
  - ► Generates quarterly benchmarking reports on the PSIs
  - ► Regularly updates Board of Directors on PSI performance and posts publicly

Results:

► Increased clinician trust in coding processes

► Identified opportunities to allocate resources to improve care (e.g., PSI 12)

► Detecting safety issues while patients are still in the hospital

   o Clinicians review clinical quality pathways

   o Address issues **before** patient is discharged

= Dramatic improvement in performance

"Our latest 9-month report places Cleveland Clinic in the top decile of performance for all of the PSIs."

– Anthony Warmuth, Administrator for Enterprise Quality

Better Care, Lower Costs at Yale New Haven Health System

- **Goal:** Use PSIs as part of initiative to improve quality and save costs

- **Background:** Improving quality is a focus of YNHHS' $125 million cost-saving plan that aims to reduce cost per case by approximately 20%.

- **Implementation:**
  - ▶ Tracked 27 quality variation indicators (QVIs), selected by team of clinicians, including selected AHRQ QIs such as pressure ulcer (PSI03), periop hemorrhage or hematoma (PSI09), DVT/PE (PSI12), postop wound dehiscence (PSI14)
  - ▶ Clinical and financial leaders received monthly reports showing cost of cases that had a QVI versus those that do not

Results:

- ► Meaningful dialogue between financial and clinical leaders
- ► Found strong concordance between clinical registry data and QVI results that use claims data, including PSIs
- ► Linked specific quality issues to cost variations; measured how quality improvement efforts affect cost per case

= Improvements in safety, reduced costs

- ► From 2012 to 2014, the expense to YNHHS per equivalent discharge was reduced by 4.6 percent, moving from $16,390 down to $15,635.
- ► YNHHS was able to pass the improved value on to payers, with a 6 percent reduction in billing per equivalent discharge dropping from $17,756 to $16,688.

Identifying Safety Event Trigger at Essentia Health

- **Goal:** Improve patient safety and pay for performance by prioritizing improvement on a subset of 10 AHRQ PSIs, including PSI 09 (Perioperative Hemorrhage or Hematoma)

  ▶ *"Our original focus on Patient Safety Indicators stemmed from the emphasis that value-based purchasers placed on these indicators."*
    - *Verna Alverson, Inpatient Clinical Quality Analyst*

- **Background:** Essentia Health is a private non-profit integrated health system with facilities in 4 states.

- **Baseline Performance:** 2013 benchmark report revealed opportunity for improvement on PSI performance.

- **Implementation:**
  ▶ Examined procedures that frequently cause hematoma, hemorrhage, or bruising
  ▶ Linked increased occurrence to use of new hemostatic wristband for angiograms
  ▶ Convened working group of physician, nursing, and education staff to develop improved process for securing the wristband

Identifying Safety Event Trigger at Essentia Health (cont'd.)

Results:

► Consistent implementation of new process across all departments resulted in decreased incidence of perioperative hemorrhage or hematoma

= Targeted provider engagement and education efforts led to safer patient care and improvement in Essentia Health's PSI 09 rate.

Federal Initiatives Using AHRQ QIs*

	Indicator Module			
	Inpatient (IQI)	Patient Safety (PSI)	Pediatric (PDI)	Prevention (PQI)
HAC Reduction Program	✓	✓		
Hospital Inpatient Quality Reporting Program	✓	✓		
Hospital Value Based Purchasing		✓		
Shared Savings Program				✓
Partnership for Patients	✓	✓	✓	
Health Care Innovation Awards (CMMI)		✓	✓	✓
Hospital Compare	✓	✓		
ACO: Accelerated Development Learning Sessions (CMMI)		✓	✓	
Home and Community Based Services		✓		✓

*A sample of CMS and CMMI initiatives that use the AHRQ QIs

MORE ABOUT THE AHRQ QIs

Advantages of the AHRQ QIs

- **Broadly Applicable**
  - ▶ 90+ measures cover broad range of conditions, procedures and populations
- **Ready-to-use**
  - ▶ Readily-available administrative data
  - ▶ Publicly available documentation and software
  - ▶ Technical assistance and FAQs
    - ○ http://www.qualityindicators.ahrq.gov/FAQs_Support/
    - ○ QIsupport@ahrq.hhs.gov
- **Actionable**
  - ▶ Provide real-time information
  - ▶ National rates available for comparison
- **Strong Scientific Basis**
  - ▶ Evidence-based
  - ▶ Many NQF endorsed
  - ▶ Updated annually
  - ▶ Ongoing improvements

Limitations of the AHRQ QIs

- **Outcomes measures**
  - ► Most actionable when combined with insight on processes

- **Limited clinical detail**
  - ► Rely on administrative claims

- **Precision depends on accuracy of documentation and coding**
  - ► Varies by institution, but it's improvable

- **Time lag when using some data sources**
  - ► e.g., HCUP, other aggregated datasets

Healthcare Is Evolving Rapidly

Measurement reflects much of that change
- Evidence-based medicine
- Practice patterns
  - ▶ Use of specific procedures or interventions
  - ▶ Health IT
  - ▶ Staffing models
- Healthcare landscape
  - ▶ Delivery and payment models
  - ▶ Quality improvement initiatives, such as Partnership for Patients from CMS

Measurement Must Keep Up

Changing Landscape

- Evidence-based practices
- Practice patterns
- Healthcare landscape
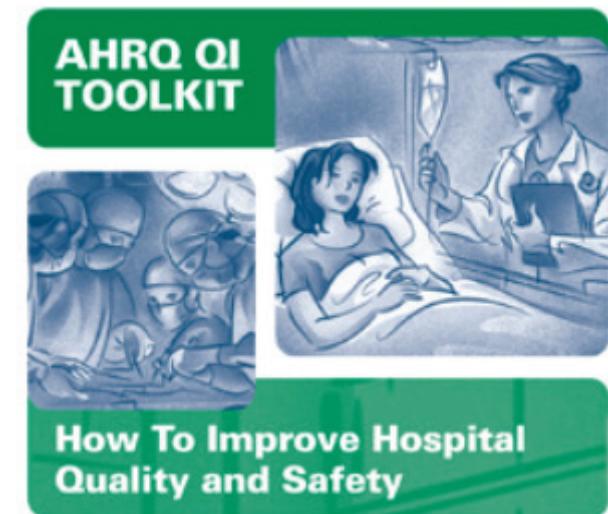
AHRQ QIs Evolve Over Time

- Refinement
  - ► Expert input
  - ► User feedback
  - ► Evolve with changing practice patterns, evidence
- Assess, evaluate uses
- Annual coding review & update
  - ► Align with latest code guidance

IMPLEMENTING THE AHRQ QIs

Resources and Support

Implementation Guidance

AHRQ QI Toolkit Includes:

- Assess readiness to change
- Apply QIs to your data
  - ► Detailed guidance
  - ► Understand your rates
  - ► Trends and comparisons
- Identify quality improvement priorities
- Implement improvements
- Monitor progress
- Analyze return-on-investment (ROI)

Available at:

http://www.ahrq.gov/professionals/systems/hospital/qitoolkit/index.html

Additional Resources

Available from AHRQ:

- Software (SAS and WinQI), with documentation
  - ► Download at: http://www.qualityindicators.ahrq.gov/Software/Default.aspx
- Technical specifications
- AHRQ QI website and technical assistance
  - ► http://www.qualityindicators.ahrq.gov/FAQs_Support/
  - ► QIsupport@ahrq.hhs.gov
- Additional detailed case study:
  - ► http://www.ahrq.gov/professionals/systems/hospital/qitoolkit/qicasestudy.html

QUESTIONS AND ANSWERS

Thank You

General Questions and Comments:

AHRQ QI Support Team

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