INTRODUCTION

AHRQ Quality Indicators Toolkit for Hospitals

This toolkit is designed to help your hospital understand the Quality Indicators (QIs) from the Agency for Healthcare Research and Quality (AHRQ), and support your use of them to successfully improve quality and patient safety in your hospital. Created by the RAND Corporation and the University HealthSystem Consortium with funding from AHRQ, it is available for all hospitals to use free of charge. The toolkit is a general guide to using improvement methods, with a particular focus on the QIs.

The AHRQ QIs use hospital administrative data to assess the quality of care provided, identify areas of concern in need of further investigation, and monitor progress over time. This toolkit focuses on the 17 Patient Safety Indicators (PSIs) and the 28 Inpatient Quality Indicators (IQIs). More information on the QIs is available in the *Fact Sheets on the IQIs and PSIs* (Tools A.1a and A.1b).

A Sequence of Steps for Improvement. The complete improvement process includes the following sequence of steps, in which you will set priorities and plan for performance improvements on the QIs, implement improvement strategies, and sustain improvements achieved:

- Determining Readiness To Change
- Applying QIs to the Hospital Data
- Identifying Priorities for Quality Improvement
- Implementing Improvements
- Monitoring Progress for Sustainable Improvement
- Analyzing Return on Investment
- Using Other Resources

Implementing Improvements. Within the Implementation Methods step is a five-step implementation cycle: diagnose the problem; plan and implement best practices; measure results and analyze; evaluate effectiveness of actions taken; and evaluate, standardize, and communicate (see Tool D.1). This model is based on the well-known PDSA (plan, do, study, act) improvement cycle. For best results, it is advisable to have someone dedicated to serve as facilitator of the improvement process, which could be a staff person or an external resource.

Toolkit Roadmap. Tools are available to support work in each of the sequence of improvement steps. The Toolkit Roadmap below will help you get started. For each key improvement step, it identifies the tools provided in the Toolkit to support your work. For each tool, the Roadmap gives a brief description of the tool and identifies additional relevant information.

Different Tools for Different Audiences. Successful improvement requires involvement by multiple positions in the hospital. Therefore, while your hospital's quality leaders are the primary audience, many tools are aimed at several audiences. The Roadmap shows the intended audiences for each tool. Your hospital may choose to use only those tools that you find helpful. View the toolkit as a "resource inventory" from which you can select the tools that are most useful, given your hospital's current quality improvement capabilities and efforts. The Toolkit Roadmap is the "shopping list" you can use to quickly identify which tools to use at any point in time.

This toolkit underwent a field test, evaluation, and revisions in response to feedback from six diverse hospitals. All information it contains is up to date as of November, 2011.

AHRQ Quality Indicator Toolkit Roadmap				
	Action Steps	**Tool That Supports Action**	**Audiences**	**Lead Role**
Section A	**Determining Readiness To Change**			
A.1.	Getting To Know the PSIs/IQIs.	Tool A.1a. Fact Sheet on Inpatient Quality Indicators (IQI) Tool A.1b. Fact Sheet on Patient Safety Indicators (PSI)	All Hospital Board and Staff Members	Senior Staff and Quality Leaders
A.2.	Help Board members and relevant staff understand the importance and financial and clinical implications of the AHRQ Quality Indicators. (The "notes" view in PowerPoint has additional instructions for using this tool.)	Tool A.2. Board/Staff PowerPoint Presentations on the Quality Indicators	Board Members, Senior Management Staff, Quality Staff	Quality Leaders
A.3.	Assess your hospital's organizational infrastructure and its readiness to support effective implementation efforts.	Tool A.3. Getting Ready for Change Self-Assessment	Senior Management Staff and Quality Leaders	Senior Staff and Quality Leaders
Section B	**Applying QIs to the Hospital Data**			
B.1.	Perform the QI calculations using the AHRQ 4.1 software.	Tool B.1. Applying the AHRQ Quality Indicators to Hospital Data	Quality and Safety Leaders, Data Analysts, Statisticians, and Programmers	Quality Leaders, Data Analysts
B.2.	Review this example of the output from the AHRQ QI 4.1 software.	Tool B.2a. IQI and PSI Rates Generated by the AHRQ SAS Programs Tool B.2b. IQI and PSI Rates Generated by the AHRQ Windows QI Software	Data Analysts or Programmers calculating rates; Quality Leaders	Data Analysts, with Quality Leaders
B.3.	Use this PowerPoint to understand and review the AHRQ QI data, trends, and rates.	Tool B.3a. Excel Worksheets for Charts on Data, Trends, and Rates To Populate the PowerPoint Presentation B.3b. PowerPoint Presentation: The AHRQ Quality Indicators, Results, and Discussion of Data Analysis	Quality Leaders, Senior Leaders, Analysts	Quality Leaders

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B.4	Understand documentation and coding issues that affect PSI and IQI rates.	Tool B.4. Documentation and Coding for Patient Safety Indicators	Providers, Clinical Documentation Specialists, Coders, Quality Leaders	Quality Leaders
B.5	Analyze the hospital's performance on the QIs by assessing trends in rates and using benchmark comparisons.	Tool B.5 Assessing Indicator Rates Using Trends and Benchmarks	Quality and Safety Staff, Senior Leaders, Hospital Board, Analysts	Quality Leaders
Section C	**Identifying Priorities for Quality Improvement**			
C.1.	Determine direction of organizational focus and decisions about which QIs should be addressed.	Tool C.1. Prioritization Matrix	Senior Leaders and Quality Staff	Senior Leaders and Quality Staff
C.2.	Review this example of a completed prioritization matrix.	Tool C.2. Prioritization Matrix Example	Senior Leaders and Quality Staff	Senior Leaders and Quality Staff
Section D	**Implementing Improvements**			
D.1.	Evaluate current systems in place, modifications to existing protocols and electronic order sets, and development of new systems and processes of care.	Tool D.1. Improvement Methods Overview	Multidisciplinary improvement team	Quality Leaders
D.2.	Define the implementation team and its goals.	Tool D.2. Project Charter	Multidisciplinary improvement team	Quality Leaders
D.3.	Understand actions taken by other hospitals to help improve performance on the QIs.	Tool D.3. Examples of Effective PSI Improvement Strategies	Multidisciplinary improvement team	Quality Leaders
D.4.	Identify existing best practices that may help in assessing options for action.	Tool D.4. Selected Best Practices and Suggestions for Improvements (for 8 PSIs)	Multidisciplinary improvement team	Quality Leaders
D.5.	Understand the extent to which current practices align with best practices.	Tool D.5. Gap Analysis	Multidisciplinary improvement team	Quality Leaders
D.6.	Assign team responsibilities and set timeline.	Tool D.6. Implementation Plan	Multidisciplinary improvement team	Quality Leaders

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D.7.	Measure progress in improving work and clinical care processes.	Tool D.7. Implementation Measurement	Multidisciplinary improvement team	Quality Leaders
D.8.	Understand what worked in the implementation process and what needs improvement.	Tool D.8. Project Evaluation and Debriefing	Multidisciplinary improvement team	Quality Leaders
Section E	**Monitoring Progress for Sustainable Improvement**			
E.1.	Conduct an ongoing, standardized process for reporting trends in the measures developed and acting upon issues identified by those trends.	Tool E.1. Monitoring Progress for Sustainable Improvement	Quality Staff	Quality Leaders
Section F	**Analyze Return on Investment**			
F.1.	Estimate the return on investment from the interventions implemented to improve performance on the QIs.	Tool F.1. Return on Investment Estimation	Senior Leaders, including the Chief Financial Officer	
Section G	**Using Other Resources**			
G.1.	Obtain further guidance for conducting effective quality improvements.	Tool G.1. Available Comprehensive Quality Improvement Guides	Quality Staff and Improvement Team	Quality Leaders
G.2.	Identify specific analytic or action tools to use in improvement processes.	Tool G.2. Specific Tools To Support Change	Quality Staff and Improvement Team	Quality Leaders
G.3.	Review this case study for an example of how one hospital used the toolkit.	Tool G.3. Case Study of PSI Improvement Implementation	Senior Leaders, Quality Staff, Improvement Team	Quality Leaders