# Board and Senior Leadership PowerPoint Presentations on the Pediatric Quality Indicators

#### What is the purpose of this tool?

The purpose of the PowerPoint presentation for the board is to help the board members understand the importance and financial and clinical implications of the AHRQ Pediatric Quality Indicators.

#### Who are the target audiences?

The key users of this tool are the quality officers and senior management staff who are educating the hospital board and/or senior leadership about the Pediatric Quality Indicators.

#### How can the tool help you?

This tool can be a standalone educational resource or serve as a resource to condense key points for presentation to your quality and patient safety committees, boards, organizational leaders, medical and surgical committees and performance improvement teams. You should delete, add, or modify slides to best suit your organization's needs.

#### How does this tool relate to others?

This tool is part of the Readiness To Change section in the Toolkit Roadmap. It can be related to the self-assessment tool by providing a rich knowledge base on the use of the AHRQ Pediatric Quality Indicators to identify quality topics for monitoring and performance improvement. An organization needs a thorough understanding of these indicators and their impact to evaluate the organization's infrastructure to support improvement efforts.

#### Instructions

Use and select the following slides to develop a presentation for your board/senior leadership. Delete or modify the text indicated in red.

Tool A.2 Slide

# The Agency for Healthcare Research and Quality (AHRQ) Pediatric Quality Indicators

Background for Hospital Board & Senior Leadership

**Date** 

### Why are we here today?

- Understand the importance of the AHRQ Pediatric Quality Indicators (PDIs).
- Understand the financial and clinical implications of the PDIs for our organization.
- Endorse the PDIs as a tool for implementing and monitoring improvement.
- Make the PDIs a priority within our organization.

### Leadership is key to improvement

- Hospital boards and senior leadership are increasingly turning to the AHRQ QIs as a tool for monitoring performance, particularly on patient safety.
- To be successful, improvement efforts within hospitals need to have attention and active support from boards and senior hospital leadership.
- Your active support will demonstrate that the hospital has made it a priority to improve quality and patient safety for pediatric patients.
- This support will help to motivate our staff to engage fully in improvement activities.

## Pediatric health care quality is important

- The safety of our patients is a priority.
- Hospital quality indicators are increasingly available to consumers.
- Medicaid is no longer reimbursing hospitals for some hospital-acquired conditions and safety events for patients covered by Medicaid (including children).
- Pediatric indicators can be used to assess performance and compare against peer hospitals.

#### What is AHRQ?

- The Agency for Healthcare Research and Quality:
  - Is part of the U.S. Department of Health and Human Services.
  - Supports research designed to improve the outcomes and quality of health care, reduce health care costs, address patient safety and medical errors, and broaden access to effective services.
  - Sponsors, conducts, and disseminates research to help people make more informed decisions and improve the quality of health care services.
  - Acts as the regulator for Patient Safety Organizations that are certified under the Patient Safety and Quality Improvement Act.

# What are the AHRQ Pediatric Quality Indicators?

- The PDIs are a set of 16 indicators that reflect quality of care inside hospitals and adverse events that children, adolescents, and, where specified, neonatal patients may experience as a result of exposure to the healthcare system.
- PDIs measure events likely to be preventable through changes at the system or provider level.
- PDIs are measured using hospital administrative data.
- One PDI (PDI 19) is a composite measure.
- Eight out of 16 provider-level PDIs are endorsed by NQF.

# Where can I find more information on the AHRQ PDIs?

 More information on the PDIs, including specifications and benchmarks, is available at <a href="http://www.qualityindicators.ahrq.gov/modules/pdi\_resources.aspx">http://www.qualityindicators.ahrq.gov/modules/pdi\_resources.aspx</a>.

### Why were the PDIs developed?

- Because quality and safety are so important, the AHRQ PDIs were developed to help hospitals:
  - Screen for potential quality and safety
     problems in children using easily accessible data.
  - Compare themselves with other hospitals using national standardized measures to assess quality of hospital care.

For more information, see *General Questions About the AHRQ QIs.* AHRQ Quality Indicators. Rockville, MD: Agency for Healthcare Research and Quality; July 2004.

www.qualityindicators.ahrq.gov/FAQs Support/default.aspx.

### How were the AHRQ PDIs developed?

- The AHRQ PDIs were developed through four processes:
  - Identification of candidate indicators
  - Literature review
  - Empirical analyses
  - Panel review
- Once developed, the PDIs were vetted by expert panels of clinicians.
- The initial set of PDI indicators was released in 2006.

For more information, see *Measures of Pediatric Health Care Quality Based on Hospital Administrative Data: The Pediatric Quality Indicators*. Rockville, MD: Agency for Healthcare Research and Quality; 2006.

http://www.qualityindicators.ahrq.gov/modules/pdi resources.aspx; and

Pediatric Quality Indicators. Rockville, MD: Agency for Healthcare Research and Quality; July 2010.

http://www.qualityindicators.ahrq.gov/Downloads/Modules/PDI/V42/Pediatric Ind 10 update.pdf.

### Why use the AHRQ PDIs?

- The AHRQ PDIs identify quality topics for monitoring and performance improvement:
  - Use hospital administrative data
  - Highlight potential quality concerns
  - Identify areas that need further study and investigation
  - Allow monitoring of changes over time
- Because we cannot always measure "quality of care" per se, we use certain measures as an "indicator" of quality.

For more information, *General Questions About the AHRQ QIs.* AHRQ Quality Indicators. Rockville, MD: Agency for Healthcare Research and Quality; July 2004. www.qualityindicators.ahrq.gov/FAQs Support/default.aspx.

#### **ICD-10-CM Conversion**

- Change from ICD-9-CM to ICD-10-CM occurred in October 2015:
  - Addition of information relevant to ambulatory and managed care encounters
  - Expanded injury codes
  - Creation of combination diagnosis/symptom codes
  - Addition of 6th and 7th characters
  - Incorporation of common 4th and 5th digit subclassifications
  - Laterality
  - Greater specificity in code assignment
- The AHRQ PDIs have been updated to reflect this change.

ICD-10-CM = International Classification of Diseases, 10<sup>th</sup> Revision, Clinical Modification.

#### **How are the AHRQ PDIs structured?**

- Definitions based on:
  - ICD-10-CM diagnosis and procedure codes
  - Often along with other measures (e.g., MS-DRG, MDC, sex, age, procedure dates, admission type)
- Numerator = number of cases with the outcome of interest (e.g., pediatric cases with pressure ulcer)
- Denominator = population at risk (e.g., hospitalized patients)
- Observed rate = numerator/denominator
- Some AHRQ PDIs measured as volume counts

MS-DRG = Medicare Severity diagnosis-related group; MDC = major diagnostic classification. Source: <a href="https://www.qualityindicators.ahrq.gov/resources/Presentations.aspx">www.qualityindicators.ahrq.gov/resources/Presentations.aspx</a>.

# An Example: Pressure Ulcer (PDI 02)

- Numerator: Discharges with ICD-10-CM code of pressure ulcer in any secondary diagnosis field among cases meeting the inclusion and exclusion rules for the denominator.
- Denominator: All medical and surgical discharges age 17 years and younger defined by specific DRGs or Medicare Severity DRGs.
- Several exclusions (e.g., length of stay <5 days, principal diagnosis of pressure ulcer).

#### Source:

http://www.qualityindicators.ahrq.gov/Downloads/Modules/PDI/V45/TechSpecs/PDI%2002%20Pressure%20Ulcer%20Rate.pdf

# How can the AHRQ PDIs be used in quality assessment?

- AHRQ PDIs can be used to flag potential problems in quality of care.
- AHRQ PDIs can be used to assess performance and compare against peer hospitals.
- Examples of hospital use of AHRQ QIs in the literature have examined the impact of:
  - Health information technology on quality of care.
  - Hospital board quality committees on quality of care.
  - The effectiveness of nurse staffing on care delivered.

Source: www.qualityindicators.ahrq.gov/Default.aspx and AHRQ Quality Indicator Toolkit Literature Review.

If you already have your current PDI data available: use slides 16-17 and delete slides 18-19.

If you do not have your PDI data available: use slides 18-19 and delete slides 16-17.

DELETE THIS SLIDE.

# **Current performance on the AHRQ PDIs**

 INSERT GRAPHS OR TEXT FROM YOUR HOSPITAL'S DATA HERE.

#### **Next steps for QI team**

- 1. Identify priorities for quality improvement.
- 2. Establish goals and performance targets.
- 3. Formulate an action plan to develop a multidisciplinary team for AHRQ PDI work.

# Sample report on hospital performance on the AHRQ PDIs



**Quality and Safety Management Report** 

Print Date: Data Extract Date: Tuesday, June 10, 2014 Wednesday, March 12, 2014

#### **Great State Medical Center**

Oct - Dec 2013 (Q4)

Agency View

AHRQ Pediatric Quality Indicators	Relative Performance	Denom	Observed	Target	UHC Median	Rank	Relative Performance	Denom	Observed	Target	UHC Median	Rank
				Score		x/n				Score		x/n
<b>AHRQ Pediatric Quality Composite Indi</b>	icators											
PDI99 AHRQ Pediatric Quality Indicator Composite	0		0.63	0.98	0.90	3/117	0		0.44	1.00	0.88	1/119
		N		Percent		x/n		N		Percent		x/n
Mortality (%)												
PDI06 RACHS-1 Pediatric heart surgery	⊖!	20	5.0	3.7	0.0	33/41	<b>a</b>	99	4.0	3.7	1.9	38/ 55
PDI21 (NQI2) Neonatal mortality	ō.	520	1.3	1.4	0.4	57/104	ŏ	2,064	0.9	1.0	0.4	60/106
		N		Rate/ 1000		x/n		N		Rate/ 1000		x/n
Surgical & Other (Rate per 1000)												
PDI01 Accidental puncture or laceration	00	1,258	0.0	1.2	0.0	7/117	00	4,990	0.0	1.2	0.3	2/120
PDI02 Pressure ulcer (Decubitus ulcer prior to 2007 Q4)	ÕÕ	188	0.0	0.2	0.0	23/103	ŏŏ	783	0.0	0.2	0.0	13/113
PDI05 Iatrogenic pneumothorax	00	1,127	0.0	0.2	0.0	21/117	<b>⊖</b>	4,516	0.2	0.2	0.0	89/120
PDI08 Perioperative hemorrhage or hematoma	00	147	0.0	5.2	0.0	4/ 98	Ō	572	3.5	5.4	0.0	76/117
PDI09 Post-operative respiratory failure	00	106	9.4	21.0	0.0	59/ 92	Ō	443	11.3	18.3	7.0	63/116
PDI10 Post-operative sepsis	00	110	9.1	21.4	0.0	54/ 93	ŌΘ	455	6.6	19.8	12.3	42/113
PDI11 Post-operative wound dehiscence	00	45	0.0	0.4	0.0	19/76	00	169	0.0	0.4	0.0	19/101
PDI12 Central venous catheter-related bloodstream infections	ŌŌ	1,091	0.9	3.0	0.0	68/116	00	4,336	0.7	2.6	0.7	50/120
PDI19 Birth trauma - injury to neonate (PSI17)		437	6.9					1,758	5.7			
PDI20 (NQI1) Iatrogenic pneumothorax in neonates (PDI04 prior to 2007Q4)	00	93	0.0	0.2	0.0	34/102	00	355	0.0	0.2	0.0	32/105
PDI22 (NQI3) Bloodstream infection in neonates	00	79	12.7	26.5	25.6	38/101	0	265	15.1	24.2	26.0	34/104
	- 8		N			x/n			N			x/n
Surgical & Other (Count)												
PDI03 Retained surgical item or unretrieved device fragment			0	0	0				0	0	0	
PDI13 Transfusion reaction			0	0	0				0	0	0	
Volumes PDI07 RACHS-1 Pediatric heart surgery			20		12	27/ 63			104		16	24/ 81
POTO/ PACHO-1 Pediatric fledit Surgery			20		12	2// 03			104		10	24/ 01

#### **Next steps for QI team**

- 1. Run AHRQ PDI report with most recent quarter's data.
- Review AHRQ PDI report at next board meeting.
- 3. Identify priorities for quality improvement.
- 4. Establish goals and performance targets.
- 5. Formulate an action plan to develop multidisciplinary team for AHRQ PDI work.