Selecting Measures

AHRQ Quality Indicators (QI) Learning Institute

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Agenda

- Welcome
- Selecting measures that are salient to consumers
- Assessing evidence to support selection of measures
- Data considerations in comparative reporting
- State experiences with selecting measures
- Questions and discussion
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Tentative Schedule

Orientation:
October - Designing Your Reporting Program

Measures/Data/Analysis:
Today - Selecting Measures & Data
December - Key Choices in Analyzing Data for the Report
January - Classifying Hospitals

Reporting/Disseminating/Promoting:
February - Displaying the Data
March - Web Site Design & Content
April - Marketing & Promoting Your Report

Evaluation:
May - Evaluation of Public Reporting Program

Closing:
June - Highlights From the Learning Institute
Polling Results

What are your priorities for improving quality reporting activities in your State? (Choose all that apply.)

- 72% Setting: hospital/inpatient care
- 68% Health-care-acquired infection reporting
- 52% Enhancing administrative data (e.g., lab data)
- 40% Reducing burden on the provider
- 40% Additional settings (outpatient/episodes)
- 20% Setting: individual physician care
- 16% Setting: group/practice care
- 16% Other
- 12% Population: pediatrics
- 12% Population: elderly
- 4% Population: mental health
Polling Results

Please check which best describes your public reporting program:

48% Voluntary
31% Legislative Mandate
14% Other
7% Organizational Mandate
0% Government Requested
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In choosing measures to be reported, take into account that the best measures:

- Are relevant to the healthcare-related concerns of the consumer audience
- Demonstrate variation and reflect care that those who are being measured can impact
- Provide information that reflects the overall quality of care provided by the institutions included in the report
- Can be easily understood and accurately interpreted by a lay audience
Consumers

■ Relevance:
  - Condition specific measures
  - Cross cutting measures (e.g. patient experience measures, patient safety measures)

■ Understanding is a prerequisite to perceived relevance
  - Labeling
  - Explaining process measures
Consumers

Maximizing accurate interpretation

- Clarifying whether to look for a high or low score
- Giving people a meaningful “comparator” when they look at scores
- Pointing out the limitations and best use of certain measures, such as:
  - Rare events
  - Volume measures
Poll Question #1

What aspects of quality do you think are most salient to consumers? (Please choose two.)

- Safety
- Access/timelines
- Clinical effectiveness
- Mortality and other outcomes
- Cost/efficiency
- Equity
- Patient experience
- Other
Questions

If you would like to pose a question to any of the speakers, please post it in the Q&A box on the right-hand side of your screen and press send.
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Four conditions must be met before proposed measures may be considered:

- The measure is in the public domain
- There is an identified responsible entity and process to maintain and update the measure
- The intended use of the measure includes both public reporting and quality improvement
- Measures should be fully developed and tested
  - Time-limited endorsement if testing will be completed within 24 months
Candidate measures are evaluated for their suitability based on four sets of standardized criteria:

- **Importance to measure and report**
  - Significant gains in quality, variation in or overall poor performance

- **Scientific acceptability of measure properties**
  - Produces consistent (reliable) and credible (valid) results

- **Usability**
  - People understand the results and are likely to find them useful for decision-making

- **Feasibility**
  - Available, retrievable without undue burden
User tool to select indicators

Indicators assigned to four tiers based on evidence

Gaps assessed for the following areas:

- Importance
- Face Validity
- Coding/Criterion Validity
- Risk Adjustment
Survey of Evidence

- Literature
  - Present on admission (POA), coding validity, preventability, correlation with cost, length of stay (LOS) or other indicators, impact of QI programs

- AHRQ Validation Activities
  - Chart review of coding validity
  - Clinical Panel Review

- National Quality Forum review

- Examination of potential improvements
Indicator Tiering: Based on the current evidence and identified gaps, the indicators are assigned to one of four tiers.

- Tier 1: Minor or no evidence gaps
- Tier 2: Moderate evidence gaps
- Tier 3: Significant evidence gaps, but addressable
- Tier 4: Significant evidence gaps, but addressable only with material resources
Tier 1

- Minor or no evidence gaps
  - 1B Serious reportable events

- Most suitable for comparative reporting/public accountability

- Strongest evidence base

- Established evidence in several areas

- No substantial evidence against use for comparative reporting

- Most endorsed by the National Quality Forum
Tier 2

- Moderate evidence gaps
- Users may choose to utilize these indicators for comparative reporting
- Some supporting evidence for use
- Some minor evidence gaps
- Indicator would be stronger with some additional evidence
- Most not currently endorsed by the NQF
Tier 3

- Significant evidence gaps, but addressable
- Not currently suitable for comparative reporting, pending further development
- At least one serious evidence gap or concern
- Further development and validation work has been identified
- Once further work is completed, indicators will be re-assigned to another tier
- Indicators not currently endorsed by NQF
Tier 4

- Significant evidence gaps, and addressable only with material resources
- Substantial gaps in evidence for use in comparative reporting
- Gaps unlikely to be addressed with further development or validation
- Not recommended for comparative reporting
- Indicators are not currently endorsed by NQF
Tier 1 Indicators

- Inpatient Quality Indicators (IQIs)
  - Esophageal Resection Volume (#01)*
  - Pancreatic Resection Volume (#02)*
  - Abdominal Aortic Aneurysm (AAA) Repair Volume (#04)*
  - Esophageal Resection Mortality (#08)*
  - Pancreatic Resection Mortality (#09)*
  - Abdominal Aortic Aneurysm (AAA) Repair Mortality (#11)*
  - Acute Myocardial Infarction (AMI) Mortality (#15 and #32)
  - Chronic Heart Failure (CHF) Mortality (#16)*
  - Acute Stroke Mortality (#17)*
  - Hip Fracture Mortality (#19)*
  - Pneumonia Mortality (#20)*
  - Incidental Appendectomy in the Elderly (#24)*
  - Bi-lateral Catheterization (#25)*

*NQF endorsed
Tier 1 Indicators

- **Pediatric Quality Indicators (PDIs)**
  - Accidental Puncture or Laceration (#01)*
  - Decubitus Ulcer (#02)*
  - Iatrogenic Pneumothorax (#05)*
  - Pediatric Heart Surgery Mortality (#06)*
  - Pediatric Heart Surgery Volume (#07)*
  - Postoperative Wound Dehiscence (#11)*
  - Blood Stream Infection in Neonates (#02)*

- **Patient Safety Indicators (PSIs)**
  - Death among Surgical Inpatients with Treatable Serious Complications (#04)*
  - Iatrogenic Pneumothorax (#06)*
  - Postoperative Hip Fracture (#08)
  - Postoperative Wound Dehiscence (#14)*
  - Accidental Puncture or Laceration (#15)*
  - Obstetric (OB) Trauma with and without Instrument (#18 and #19)

*NQF endorsed*
Tier 1B Indicators

- **PSIs**
  - Death in Low Mortality Diagnosis-related groups (DRGs)*
  - Transfusion Reaction
  - Foreign Body Left in During Procedure

- **PDIs**
  - Transfusion Reaction
  - Foreign Body Left in During Procedure

*NQF endorsed*
Tier 2 Indicators

- **IQI**
  - Hip Replacement Mortality (#14)

- **PDI**
  - Iatrogenic Pneumothorax in Neonates
  - Postoperative Hemorrhage or Hematoma (#08)
  - Postoperative Respiratory Failure (#09)
  - Postoperative Sepsis (#10)

- **PSI**
  - Postoperative Hemorrhage or Hematoma (#09)
  - Postoperative Physiologic and Metabolic Derangement (#10)
  - Postoperative Respiratory Failure (#11)
  - Postoperative Deep Vein Thrombosis (DVT) or Pulmonary Embolism (PE) (#12)*
  - Postoperative Sepsis (#13)
  - Birth Trauma (#17)*

*NQF endorsed*
Tier 3 Indicators

- **IQIs**
  - Coronary Artery Bypass Graft (CABG) Mortality (#12)
  - Craniotomy Mortality (#13)
  - Gastrointestinal (GI) Hemorrhage Mortality (#18)

- **PDIs/NQIs**
  - Hospital Acquired Vascular Catheter Related Infections (#12)
  - Neonatal Mortality

- **PSIs**
  - Decubitus Ulcer (#03)
  - Hospital Acquired Vascular Catheter Related Infections (#07)
Tier 4 Indicators

**IQIs**
- CABG Volume (#05)
- Percutaneous Transluminal Coronary Angioplasty (PTCA) Volume (#06)
- Carotid Endarterectomy Volume (#07)
- Cesarean Delivery (#21 and #33)
- Vaginal birth after caesarean (VBAC) Delivery (#22 and #34)
- Laparoscopic Cholecystectomy (#23)
- PTCA Mortality (#30)
- Carotid Endarterectomy Mortality (#31)

**PSIs**
- Complications of Anesthesia (#01)
- OB Trauma-Cesarean Delivery (#20)
Applying Guidance to your Own Report

- Guidance document is one source of information
- Users need to weigh their own situation to select indicators
  - Tier 2 indicators may be more useful for some purposes than others
Poll Question #2

Are you currently using the AHRQ QI for public reporting?

- Yes
- No
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Data Considerations

- **Data availability**
  - Number of reported diagnosis and procedure codes
  - Reporting of e-codes
  - Present on admission
  - DNR (do not resuscitate), reporting of v-codes

- **Data definitions**
  - Admission source (point of origin)
  - Admission type (definition of “elective”)
Poll Question #3

What concerns about quality indicators do you most frequently receive from providers? (Choose all that apply.)

- The indicator is not clinically important
- The patient(s) did not have the outcome of interest
- The risk adjustment is not adequate
- The outcome is not preventable
- The results are not consistent with other sources of information
- The methods used are not understandable
- Collection of the measure is too burdensome
- Other
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Hospital Performance Measure Selection

Michele Shipp, MD, MPH, DrPH
HB 197 became law in November 2006

Requires Ohio hospitals to report performance measure data to the Ohio Department of Health for the purpose of public reporting

Required Measure Sets

- Centers for Medicare and Medicaid Services (CMS)
- The Joint Commission (JC)
- National Quality Forum (NQF) endorsed measures
- Agency for Healthcare Research and Quality (AHRQ)
A Hospital Measures Advisory Council was created by statute and consisted of:

- Director of Health (Council Chair)
- Two members of the House of Representatives
- Two members of the Senate
- Superintendent of Insurance
- Executive Director of the Commission on Minority Health
- Representatives from several agencies
Creation of other Groups

Mandated Groups

- A Data Expert Group
- An Infection Control Group

Ad Hoc Groups

- The Advisory Council created Pediatric and Perinatal workgroups
Process for Measures Selection

- Data Expert Group monthly meetings
- Creation of set criteria as guidelines
- Examination of measure specifications
- Selection of measures
- Recommendations to Advisory Council on selected measures
Measure Selection Criteria

- **Importance**
  - Do the measures reflect unequivocally important aspects of patient care?

- **Preventability**
  - Can a poor score be prevented through proper care?
  - Is excess variation in the data accounted for by factors unrelated to hospital quality?

- **Genuine quality improvement**
  - Can a hospital’s rate be improved without improving quality?
Measure Selection Criteria (cont.)

- **Data integrity**
  - Can a hospital accurately collect the data from its records?
  - Does the measure adequately measure the construct it attempts to measure?

- **Ability to publicly report**
  - Is the measure of use to consumers?
  - Is the measure comprehensible to consumers?
  - Do hospitals have a sufficient case load to accurately report quality?

- **Burden**
  - Does calculating the measure place undue burden on hospitals?
Measure Selection Criteria (cont.)

- **Evidence-based**
  - Is there scientific research demonstrating the accuracy and importance of the measure?

- **Variance**
  - Is there sufficient variability in performance among hospitals to allow for comparison?

- **National Quality Forum endorsement**
  - Is the measure endorsed by the National Quality Forum?
Next Steps

- Adopt rules reflecting recommended measures
  - Six to nine month process
    - Public comment period
    - Public hearing
  - Reporting of new measures to begin no earlier than October 2009

- Development of the consumer website
  To be operational by January 2010
If you have any questions please contact Kaliyah Shaheen at 614-995-4982 or kaliyah.shaheen@odh.ohio.gov

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If you would like to pose a question to any of the speakers, please:

- Post it in the Q&A box on the right-hand side of your screen and press send

  OR

- Click the “raise your hand” button to be un-muted and orally ask a question
Next Webinar

Key Choices in Analyzing Data

December TBD, 2008, at 12:00 pm ET

Patrick Romano, UC-Davis
Warren Strauss, Battelle Memorial Institute

You are welcome to invite one data analyst from your organization.
Web Forum

- Add Events to Calendar
- Check Announcements
- Add Contact Info and Review Membership
- Add Events to Calendar
- Share Documents
- Initiate and Participate in Discussion
- Resource Links
Extranet Training

November 25, 2008 @ 1:00 pm ET
OR
December 2, 2008 @ 11:00 am ET

We will send information soon
For More Information

- QI Learning Institute Web Forum:
  https://ahrqqili.webexone.com/
- QI Learning Institute E-Mail:
  QualityIndicatorsLearning@ahrq.hhs.gov
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