Hands-on Tool Training: State Snapshots

State Healthcare Quality Improvement Workshop:
Tools You Can Use to Make a Difference
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Overview

- **State Snapshots**
  - State-level measures from NHQR
  - Technical challenges

- **Maine Quality Forum**
  - Hospital-level measures
  - Technical challenges scaling the State Snapshot application to the hospital level

Technical Challenges of the NHQR State Snapshots

1. Given the wide range of state-level measures in the NHQR, how do we summarize the information?

2. How do we present the material to a general audience?

3. How do we build a web environment that is easily updated as material changes?

How do we summarize the NHQR measures?

- Decide which NHQR measures belong with each composite
  - Overall, type of care, setting of care, care by clinical area
- Classify state performance for each measure
  - Calculate all-state and regional averages
  - Determine if the state is statistically better than average, average, and worse than average
- Score state across measures in a composite
  - 1 point for each NHQR measure that was better than average.
  - 0.5 point for each NHQR measure that was at average.
  - 0 points for each NHQR measure that was worse than average.
  - Sum points and divide by the number of measures

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How do we present the material?

- **Composite-specific information**
  - Graphic "speedometers" to display current and baseline score for all-state and regional comparison
  - Best performing states table

- **Measure-specific information**
  - Data tables "behind" composite speedometers
  - Strongest/weakest measures
  - Ranking table on selected measures

- Web pages are data driven.

- XML files contain measure titles, composite names, state-level data, and information on associated graphic files.

- Template web page displays appropriate content based on selection of state and composite measure.

- Text and graphic updates are made by updating XML files.
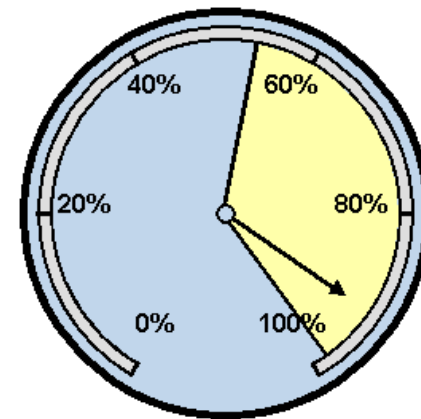
Technical Challenges of the MQF Web Site

- Reporting by hospital has unique challenges
  - Small N (hospitals)
  - Small n (cases)
- Statistical test within an individual measure – not possible
- Statistical test for difference within composite – only possible for some composites

MQF Web Site – Clinical

- **QIO Clinical Measures**

  – Composites for heart disease, pneumonia, preventing infections

  – Statistical test (logistic regression) for difference within composite

Performance Meter:
Overall Heart Disease Care

Hospital X is an Average
Performer in Overall Heart
Disease Care

MQF Web Site - Nursing

■ **Nursing Data**

– No statistical test for differences

– Data tables with rates for the hospital and the average of similar hospitals

MQF Web Site - Consistency

- Consistency of performance meter on 8 clinical and 2 nursing measures reported by most Maine hospitals

- Ranks measures as in the best/lowest 10% of all hospitals

Consistency of Performance Across Ten Measures of General Hospital Care

- Best in 20% of measures
- Average in 70% of measures
- Worst in 10% of measures