

Research Questions to Accelerate Adoption

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Topics

- 1. NQF Framework for Metric Evaluation**
- 2. Some Research Questions**
- 3. Improvement Equation**
- 4. Your Ideas for Research Questions**

NQF Framework for Metric Evaluation

1. Importance:

- Variation in quality
- Low levels of performance
- Key leverage point in improving quality

2. Scientific Acceptability:

- Well defined
- Reliable
- Valid
- Precise
- Adaptable
- Risk adjusted
- Process linked to outcome

NQF Framework for Metric Evaluation

3. Usability

- Can be used to make decisions
- Statistically meaningful
- Clinically meaningful
- Dissemination strategy in place
- Fosters Improvement

4. Feasibility

- Cost of measurement
- Timing, frequency specified
- Auditing strategy
- Confidentiality

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Research Questions to Accelerate Adoption Using NQF Framework

2. Scientific Acceptability

■ Validity

- Is mortality data a marker of other meaningful aspects of care?
 - Adverse events?
 - Errors?
 - Processes of care? (HQA, Hand hygiene, VAP)
 - Complications? (PSIs, HAIs)

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2. Scientific Acceptability

■ Precision

- Can mortality data discriminate real differences in performance? (positive predictive value of poor performer identification)
- Can mortality data reflect more than random variation?
- What is the concordance between the models?

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2. Scientific Acceptability

■ Reliability

- Are the data reliable within an organization? (accurately distinguish complications from co-morbidities)
- Are the data reliable across organizations? (documentation and coding consistency)

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2. Scientific Acceptability

- Risk Adjustment: **Can we ...**
 - Understand the issue of differences in coding for palliative care?
 - Improve the capture of severity with more clinical data?

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3. Usability

- Are differences in performance clinically meaningful?
- Are differences in performance statistically meaningful?

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3. Usability

■ Fosters Improvement

- Can providers use the data to make decisions?
- How can the data be converted into actionable improvement?
- Can the data be used to engage staff in improvement?
- How can drill down capability be used for improvement?

■ Unintended Consequences

- What are the unintended consequences of a national mortality measure?

Improvement Equation

Generalizable Medical Evidence + Specific Context → Measured Improvement

↑
E-B Interventions
• Clinical
• Safety
• Reliability

↑
Hospital

↑
Mortality metric

A complementary framework for developing research questions

A Research Agenda ... More Ideas?