

Quality Measures for Advancing BSI



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Time to ask.
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Uses of Quality Measures



- Establish precise objectives
- Guide quality improvement
- Enable accountability
- Serve as basis for incentives

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Be careful:

What we choose to measure is what we get

- Early 1990s - VA System
- Quality measure:
% of patients who completed alcohol screens
- Results (Late 1990s - OMB audit):
>90% screened, very few interventions/referrals

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Be careful:

What we choose to measure is what we get

- ❑ Large healthcare organization
- ❑ Quality measure:
% of patients with positive alcohol screens who receive interventions or referrals
- ❑ Results:
Lots of interventions, little reduction in drinking

Quality Measures Should Reflect Key Objectives

- Process
 - ❑ Population-wide screening
 - ❑ Assessment for all patients with positive screens
 - ❑ Evidence-based interventions and referrals as dictated by assessments
- Outcomes
 - ❑ Behavioral outcomes demonstrated possible in prior studies

Can Intervention Quality be Measured?

- ❑ Training?
- ❑ Time?
- ❑ Patient satisfaction?
- ❑ Documentation of intervention components?
- ❑ Analysis of audio recordings?

*Not with sufficient validity and efficiency
Therefore, outcome measures are needed*

Example: Process Measure for Alcohol BSI

$$S \times A \times [(N \times BI) + (D \times RRx)]$$

	Description	Numerator	Denominator
S	Screen completion	Completed screens	Eligible patients
A	Assessment completion	Completed assessments	Positive screens
N	Non-dependent pts	Risky/problem use	Completed assessments
BI	Brief intervention	Received BI	Risky/problem use
D	Dependent pts	Dependent	Completed assessments
RRx	Referred + offered Rx	Referred + offered Rx	Dependent

Example: Process Measure for Alcohol BSI

$$1.0 \times 1.0 \times [(0.1 \times 1.0) + (0.9 \times 1.0)] = 1.0$$

	Description	Numerator	Denominator	Ex.
S	Screen completion	Completed screens	Eligible patients	1.0
A	Assessment completion	Completed assessments	Positive screens	1.0
N	Non-dependent pts	Risky/problem use	Completed assessments	0.1
BI	Brief intervention	Received BI	Risky/problem use	1.0
D	Dependent pts	Dependent	Completed assessments	0.9
RRx	Referred + offered Rx	Referred + offered Rx	Dependent	1.0

Example: Process Measure for Alcohol BSI

$$0.5 \times 0.5 \times [(0.1 \times 0.5) + (0.9 \times 0.5)] = 0.125$$

	Description	Numerator	Denominator	Ex.
S	Screen completion	Completed screens	Eligible patients	0.5
A	Assessment completion	Completed assessments	Positive screens	0.5
N	Non-dependent pts	Risky/problem use	Completed assessments	0.1
BI	Brief intervention	Received BI	Risky/problem use	0.5
D	Dependent pts	Dependent	Completed assessments	0.9
RRx	Referred + offered Rx	Referred + offered Rx	Dependent	0.5

Example: Process Measure for Alcohol BSI

$$1.0 \times 0.0 \times [(0.0 \times 0.0) + (0.0 \times 0.0)] = 0.0$$

	Description	Numerator	Denominator	Ex.
S	Screen completion	Completed screens	Eligible patients	1.0
A	Assessment completion	Completed assessments	Positive screens	0.0
N	Non-dependent pts	Risky/problem use	Completed assessments	0.0
BI	Brief intervention	Received BI	Risky/problem use	0.0
D	Dependent pts	Dependent	Completed assessments	0.0
RRx	Referred + offered Rx	Referred + offered Rx	Dependent	0.0



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Example: Outcome Measure for Alcohol BSI

$$S \times A \times FU \times (Red/0.2)$$

	Description	Numerator	Denominator
S	Screen completion	Completed screens	Eligible patients
A	Assessment completion	Completed assessments	Positive screens
FU	Follow-up	Follow-up data collected	Follow-up data expected
Red	Reduction in binges	Binge days: Baseline – Follow-up	Baseline binge days



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Example: Outcome Measure for Alcohol BSI

$$1.0 \times 1.0 \times 1.0 \times (0.1/0.2) = 0.5$$

	Description	Numerator	Denominator	Ex.
S	Screen completion	Completed screens	Eligible patients	1.0
A	Assessment completion	Completed assessments	Positive screens	1.0
FU	Follow-up	Follow-up data collected	Follow-up data expected	1.0
Red	Reduction in binges	Binge days: Baseline – Follow-up	Baseline binge days	0.1



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Key Decisions Around Quality Measures and Incentives

- We can't expect perfection
- How much is good enough?
- Should expectations increase over time?
- Should provider incentives be positive, negative or both, and how strong?



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Summary

- Screening measures alone are inadequate
- Process measures on intervention quality are lacking
- Composite measures can indicate population-level service delivery and behavioral outcomes
- Such measures can help guide quality improvement and serve as the basis for financial incentives



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