

Cataloging and Evaluating Mental Health Care Quality Measures for Better Comparative Performance Management

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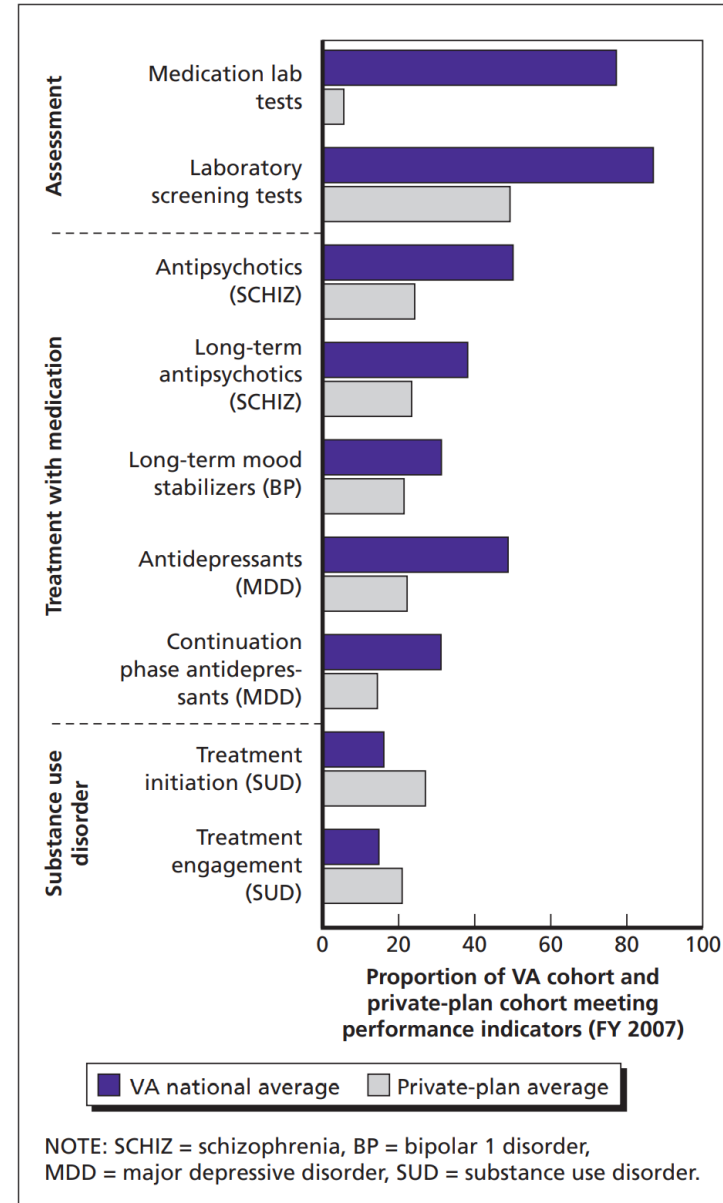
Menlo Park, CA

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The views expressed in this presentation are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs or the United States government.

In general, the VA performs as well, if not a bit better, than elsewhere on standardized quality of mental health care measures.

Figure 3
The VA Outperformed Private Plans on Seven of Nine Quality Measures

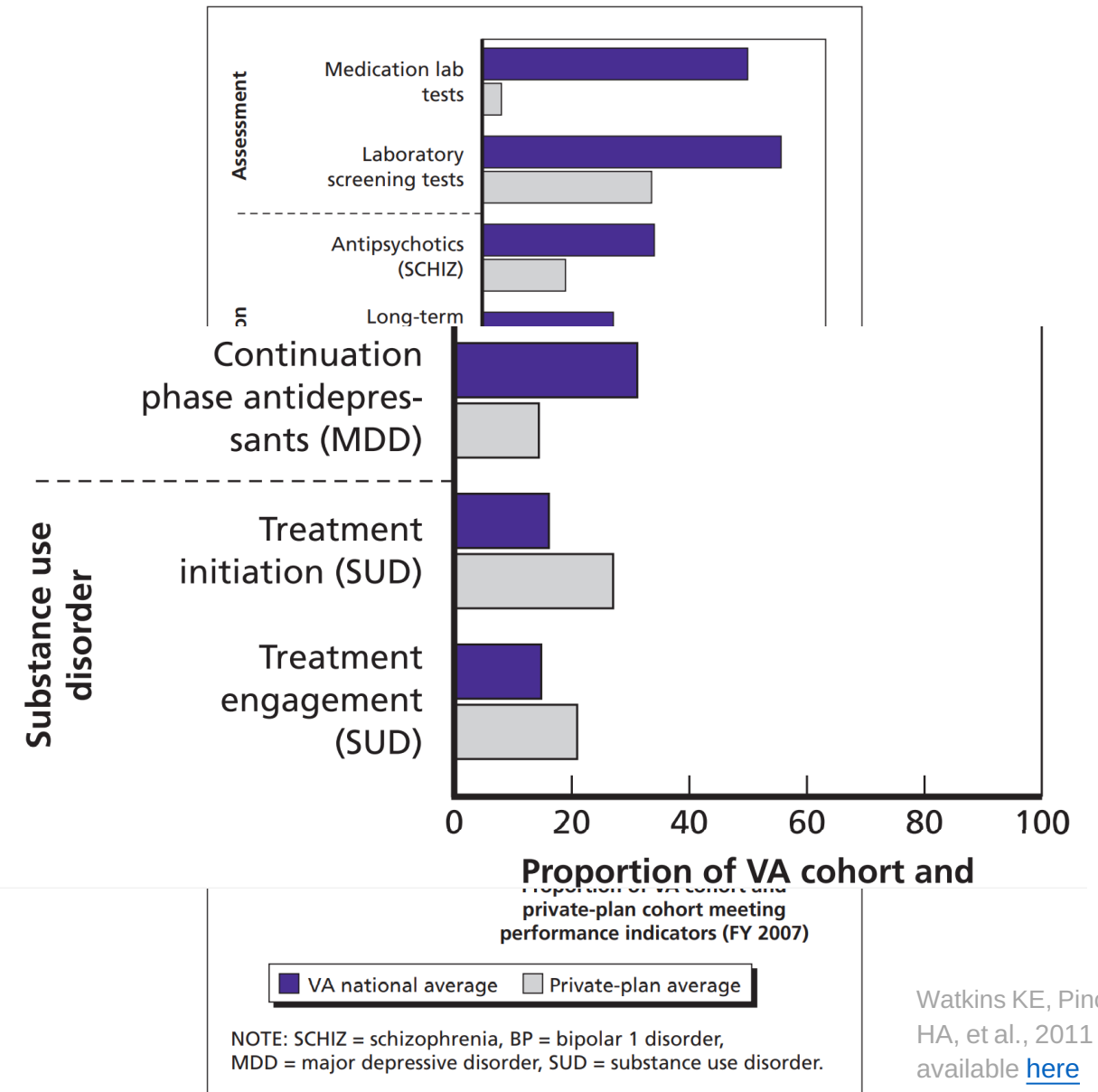


Watkins KE, Pincus HA, et al.,
 Veterans Health Administration
 Mental Health Program
 Evaluation: Capstone
 Report, Santa Monica, Calif.:
 RAND Corporation, TR-956-
 VHA, 2011
 (http://www.rand.org/pubs/technical_reports/TR956.html)




But this story is about the measures we use to evaluate quality...

“Performance on the SUD indicators within the VHA may lag private-plan performance because of the significantly higher prevalence of SUD in the VA cohort (57.0 percent) than in the privately insured population (19.1 percent). This could mean that individuals in the VHA SUD cohort are less sick than individuals in the private plan, perhaps because the VHA screening process identifies a large proportion of individuals with SUDs, and also because systematic screening for substance use typically does not happen in the private sector. It is also possible that many veterans are identified in the administrative data as having an SUD when, in fact, their substance abuse is in remission.”

Figure 3
The VA Outperformed Private Plans on Seven of Nine Quality Measures



The VA faces complex decisions about its performance management strategy for delivery of mental health (MH) and substance use disorder (SUD) treatment.

-  Evaluate quality of MH/SUD care provided to Veterans
-  Monitor quality of purchased care provided to Veterans
-  Respond to legislative direction toward more VA/non-VA comparisons of treatment quality



High quality treatment for mental health and substance use disorders

Partnered Research Goal

The measures upon which we base our evaluations of quality have a central role in the direction and success of quality improvement efforts.

Our Goal

Catalogue, rigorously evaluate, and make recommendations about which quality measures are best for comparing VA and non-VA quality of mental health and substance use disorder treatment.

Project Overview

2 Main Goals in Phase 1 (2 Years)

- Systematically scan for, catalogue, and prioritize measures
- Rigorously evaluate the highest-priority measures

Basic Anatomy of Our Partnered Approach

- Operationally-embedded research team: Operations staff with formal investigator roles on the grant
- Office of Mental Health and Suicide Prevention (National Program Office)
- Scientific Advisory Panel: 14 members from both research and operations, National Program Offices, VISN Officers, Service Line Chiefs
- Collaborations with other HSR&D researchers to achieve goals of project
- Ad hoc consultation: VISN/VACO Mental Health Metrics Workgroup, local Veterans and Family Advisory Council

Cataloguing Quality Measures to Meet Partner-Stakeholder Needs

Scanning for & Cataloguing Measures

- Scanned 4,420 measures
- 376 unique mental health or substance use disorder quality measure constructs catalogued
- Numerous attributes abstracted for sorting and selecting among the measures catalogued
- Need exists for both measure harmonization and new measure development



Partner Uptake of Catalogue

- Close partnership allowed for immediate use by National Program Offices
- Informed OMSHP recommendations to Office of Healthcare Transformation on MISSION Act Response
- Used in planning to align measures in national SUD quality management strategy

Selecting Quality Measures based on Partner-Stakeholder Priorities

Prioritizing Measures

- Used modified expert panel method to understand Advisory Panel members' priorities (e.g., outpatient services, measure in use elsewhere such as Medicare)
- Mapped Advisory Panel priorities to all catalogued quality measures
- Assigned each measure a score based on the number of Advisory Panel priorities it met
- Research team classified top-ranked measures into 3 priority area themes
- Found this to be an efficient way to gather and distill complex information and partner perspectives

Quality Measurement Priority Area

Process and outcome quality of treatment for depressive disorders

Care continuity and engagement in high-risk populations

Population coverage and access to care for substance use disorder



Example High Priority Measure
Antidepressant Medication Management (AMM) (measure info [here](#))

Measure Evaluation Framework

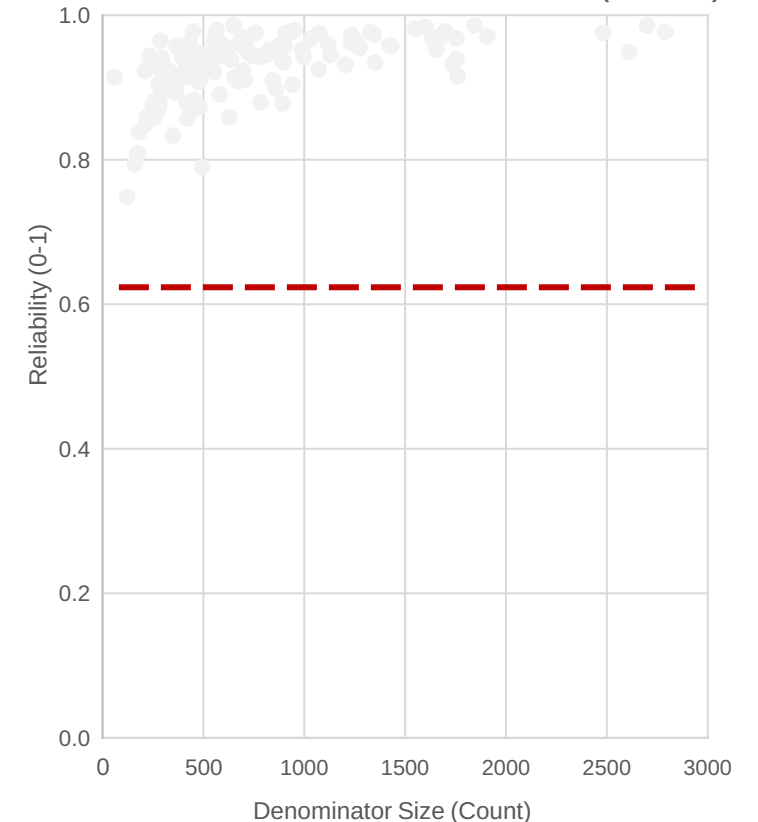
Feasibility	Can the measure be feasibly calculated in data generated at both VA and elsewhere?
Strength of Measurement Properties	What is the strength of clinical rationale, evidence grading in practice guidelines, etc.? **Does measure have essential properties for evaluating quality (e.g., reliability, validity)?**
Comparability and Equitability	Can we expect the measure to tap a comparable signal of quality at VA and elsewhere?
Potential for Unintended Consequence	What harms could come from using the quality measure, either to VA (e.g., misdirected resources) or to patients (e.g., program-driven adverse patient selection)? **Focus for the rest of today's presentation

Testing Reliability of the Antidepressant Medication Management (AMM) Measure at the Integrated Health Care System Level

AMM reliability only tested for observations calculated at the health insurance plan level of analysis, to our knowledge

AMM has good reliability for use at the integrated health care system level of analysis, which is how the VA uses it (i.e., what our partner needs to know)

Reliability of Observed VA Facility Performance on AMM Continuation Phase Measure (N=129)



Scientific Details

- Testing the reliability of quality measures is important to be confident that we can distinguish between the levels of performance we observe across units (e.g., across VA facilities)
- Reliability is influenced by sample size, inter-unit differences in performance, and measurement error
- For binary met/not met quality measures, a beta-binomial regression model can help us estimate reliability of observations
 - Use alpha & beta parameters extracted from beta-binomial regression and the observed data to calculate reliability
 - A level of reliability ≥ 0.7 is generally considered acceptable reliability of an observation (higher is better)
- See Adams (2009) https://www.rand.org/content/dam/rand/pubs/technical_reports/2009/RAND_TR653.pdf for more information about the method used here

Testing the Predictive Validity of the AMM Measure

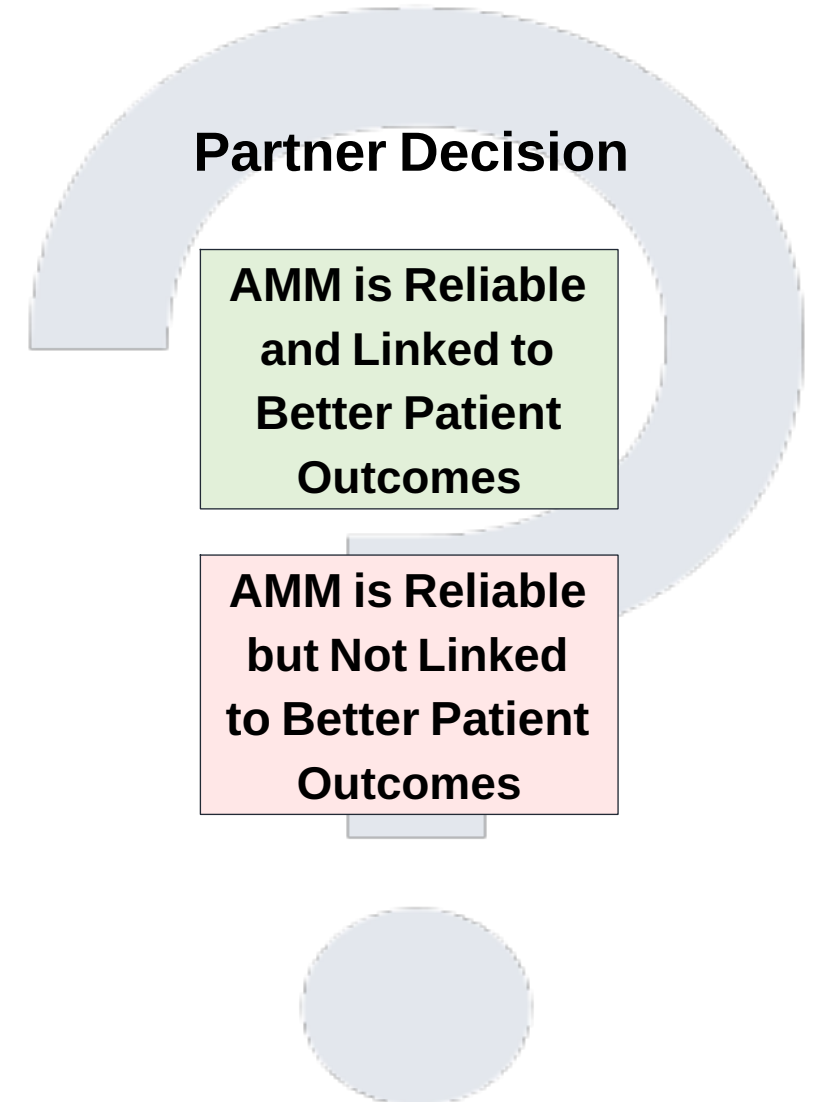
Process measures like AMM are, ideally, demonstrably and tightly linked to outcomes from treatment (e.g., quality depression treatment → more depression remission)

We have found no studies demonstrating this link for AMM

Will test predictive validity of AMM (details below)

Scientific Details

- First run a propensity score model predicting met/not on the AMM measure with appropriate pre-measure patient level variables (socio-demographics, diagnoses, utilization)
- Second conduct a propensity score-weighted mixed effects logistic regression analysis testing associations between meeting/not meeting AMM measure and subsequent outcome of interest: 6-month depression symptom remission. Example [here](#)
- Include VA performance level on AMM measure as a covariate and a random effect for VA facility to account for ambient aspects of quality at the facility that might confound testing patient-level associations
- Can fit different distributions depending on outcome being tested (linear for symptom reduction, etc.)



Thank You to You, To Our Team, Advisory Panel, HSR&D and Our Partners

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