

The STAndards for BipoLar Excellence (STABLE) Project: A Bipolar Disorder Quality Improvement Initiative to Develop and Validate Evidence-based Performance Measures for National Endorsement

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Background

- There is a national priority to screen for and appropriately treat major depressive disorder
- Screening for Bipolar Disorder (BPD) often is overlooked leading to under or missed diagnosis
- BPD patients often present with depressive symptoms leading to misdiagnosis and inappropriate treatment
- A need exists to develop evidence-based performance measures (PM) to enable measurement based quality improvement to occur in primary and specialty care sites
- The STABLE Project developed and tested fifteen PM and subsequently submitted seven to the National Quality Forum (NQF) for endorsement because of funding cycle deadline
- We report on the development, validation, and dissemination of five PM subsequently endorsed by NQF

Objectives

- Identify, develop and test evidence-based clinical PM for bipolar disorder
- Develop a quality improvement support mechanism (resource tool kit) to facilitate use of the clinical PM in outpatient practice sites
- Seek endorsement and promote adoption & use of the PM by public and private national stakeholders (e.g., National Quality Forum) to advance the care of bipolar disorder

STABLE Measures Development and Endorsement Process



STABLE National Coordinating Council: 2005-06 Project Participants

- Co-Chairs
 - » William Golden, MD, FACP
 - » Paul Keck, MD
- Psychiatrists
 - » Richard M. Hermann, MD
 - » John Oldham, MD
 - » Gary Sachs, MD
 - » Trisha Suppes, MD, PhD
- Primary Care Physicians
 - » J. Sloan Manning, MD
 - » John Williams, MD, MHS
- Expert/Consulting Members
 - » Ron Kessler, PhD
 - » Bernard Rosof, MD, MACP
- Advocacy/Support Organizations
 - » DBSA – Barbara Hylard
 - » NAMI – Ken Duckworth, MD
 - » NMHA – Nada Stotland, MD, MPH

PM Development Process: Identify Measures

Development Step	STABLE Process
Select Clinical Condition to Measure	<ul style="list-style-type: none"> • Review prevalence and burden of illness • Reviewed literature re: screening, diagnosis, treatment, and monitoring • Reviewed evidence-based guidelines
Select Key Aspects of Care to Measure	<ul style="list-style-type: none"> • Drafted measurement concept statements on key aspects of care based on strength of evidence in the literature • Identified and ranked measurement concept statements using a modified RAND Appropriateness method
Design Specifications for Measure	<ul style="list-style-type: none"> • Developed measures specifications [Details at http://www.cqaimh.org/stable_measures.html] • Identified physician as unit of analysis • Identified dichotomous measure as the basis for indicator standard • Developed a protocol for scoring measures
Develop Data Collection Strategy	<ul style="list-style-type: none"> • Defined medical record as the data source • Created case report form and dictionary [available at www.cqaimh.org/data] • Determined a measure was feasible if the required data was present at least 20% of the time in the medical record or the measure was determined to be of critical importance if present <20%
Test Scientific Strength of Measures	<ul style="list-style-type: none"> • When used to select measures the RAND Method has demonstrated face and content validity • Pilot test – identified problems with data collection tool, preliminary data feasibility, and abstractor reliability • Field testing – evaluated data feasibility and conformance to measures in clinical practice
Obtain and Analyze Conformance Findings	<ul style="list-style-type: none"> • Constructed and implemented data analysis algorithms [available at: http://www.cqaimh.org/data.html]

NQF Endorsed PM Development Results

Summary Statements for NQF Endorsed STABLE PM

Depression: Screening for bipolar mania/hypomania prior to treatment for depression	This measure assesses the percentage of patients presenting with depression who were assessed, prior to the initiation of treatment, for the presence of prior or current symptoms and/or behaviors associated with mania or hypomania.
Depression or Bipolar Disorder: Assessment for risk of suicide	This measure assesses the percentage of patients diagnosed with bipolar disorder, or with unipolar depression, who receive an initial assessment that considers the risk of suicide.
Depression or Bipolar Disorder: Assessment for substance use	This measure assesses the percentage of patients with bipolar disorder, or unipolar depression, who receive an initial assessment that considers alcohol and chemical substance use.
Bipolar Disorder: Screening for hyperglycemia when atypical antipsychotic agent is prescribed	This measure assesses the percentage of patients diagnosed with bipolar disorder and treated with an atypical antipsychotic agent who received at least one assessment for hyperglycemia within the initial 16 weeks of treatment.
Bipolar Disorder: Monitoring change in level-of-functioning	This measure assesses the percentage of patients diagnosed and treated for bipolar disorder who are monitored for change in their level-of-functioning within 12 weeks of initiating treatment.

Description of Sites Used to Field Test STABLE PM

Field Test Site Characteristics	Number of Sites n = 80
Practice Type	
Psychiatry	48
Primary Care	32
Setting	
Urban	29
Suburban	30
Rural	21
Region	
Northeast	16
West	13
Midwest	30
Southeast	21

Description of Sites Used to Field Test STABLE PM (continued)

Field Test Patient Characteristics	Bipolar Disorder Diagnosis n = 419	Depression Diagnosis n = 383
Total Cases = 802		
Practice Type		
Treated by Psychiatry – n (%)	345 (72%)	145 (38%)
Treated by Primary Care – n (%)	74 (18%)	238 (62%)
Practice Size		
Solo Practice	61.6%	41.0%
2-5 Physicians	10.7%	16.7%
>5 Physicians	27.7%	42.3%
Demographics		
Urban	43.9%	26.9%
Suburban	41.1%	37.3%
Rural	15.0%	35.8%

NQF Endorsed PM: Field Test Results of Physician Conformance to STABLE PM

Kappa statistics were computed for inter-abstractor reliability on the numerator and denominator and ranged between 0.753 and 1.0. Kappa statistics were unable to be computed if there was 100% agreement between abstractors and the agreement was unidirectional.

Screening Measure: percent of patients screened for bipolar mania/hypomania prior to treatment for depression

Total Database Depression Cases 383	FINDINGS	
Patients treated by Psychiatrist	62.8%	(91/145)
Patients treated by Primary Care	38.4%	(91/237)
All patients	47.6%	(182/382)

Screening Measure: percent of patients assessed for risk of suicide for bipolar disorder or depression

Depression 383 total cases Bipolar Disorder 419 total cases	FINDINGS	
	Depression	Bipolar Disorder
Patients treated by Psychiatrist	88.3% (128/145)	89.6% (309/345)
Patients treated by Primary Care	45.0% (107/238)	39.2% (29/74)
All patients	61.4% (235/383)	80.7% (338/419)

Screening Measure: percent of patients assessed for alcohol and chemical substance abuse in patients with bipolar disorder and depression

Depression 383 total cases Bipolar Disorder 419 total cases	FINDINGS	
	Depression Both alcohol & chemical substance use	Bipolar Disorder Both alcohol & chemical substance use
Patients treated by Psychiatrist	78.6% (114/145)	87.0% (300/345)
Patients treated by Primary Care	18.1% (43/238)	37.8% (28/74)
All patients	41.0% (157/383)	78.3% (328/419)

Screening Measure: percent of patients screened for hyperglycemia when an atypical antipsychotic agent is prescribed for patients with bipolar disorder

Bipolar Disorder 419 total cases 345 = psychiatry cases 74 = primary care cases	FINDINGS	
Patients treated by Psychiatrist	19.4%	(33/170)
Patients treated by Primary Care	20.8%	(10/48)
All patients	19.7%	(43/218)

Monitoring Measure: percent of patients monitored for change in level-of-functioning in patients with bipolar disorder

Bipolar Disorder 419 total cases 345 = psychiatry cases 74 = primary care cases	FINDINGS	
Patients treated by Psychiatrist	43.8%	(144/329)
Patients treated by Primary Care	30.6%	(22/72)
All patients	41.4%	(166/401)

Dissemination Strategies

National Invitation Conference – Washington DC March, 2007

Center for Quality Assessment and Improvement in Mental Health
(Tuft's New England Medical Center) Website (www.cqaimh.org/stable.html)

Supplement to Journal of Psychiatric Practice (May 2008) with Proceedings from
National Invitation Conference

STABLE Measures Maintained by Tuft's New England Medical Center's CQAIMH

www.cqaimh.org

STABLE Measures are available for downloading and are in the public domain

Conclusion

- The STABLE Project provided a prototype process for developing evidence-based performance measures for mental health
- The STABLE Project demonstrated that the quality measures were feasible, reliable and valid and are ready for use
- The STABLE Project field test results show significant gaps between clinical guidelines and practice in the management of BPD
 - » Assuming that physicians are aware of evidence based BPD clinical guidelines, the STABLE Project demonstrates a significant need to implement measurement-based quality improvement initiatives to change practice in primary and specialty care practice sites
 - » Recent research that has demonstrated the importance of screening for hyperglycemia among patients administered an antipsychotic has not diffused into clinical practice or its importance is not recognized by primary or specialty care
 - » Monitoring level-of-functioning, a close proxy to an outcome measure, shows that few primary care or specialty care physicians document that they monitor progression of symptoms over the duration of treatment

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