

**American Medical Association (AMA)-convened Physician Consortium
for Performance Improvement®**

**Adult Major Depressive Disorder
Performance Measurement Set**

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Adult Major Depressive Disorder

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Executive Summary: Toward Improving Outcomes for Adult Patients with Major Depressive Disorder

Purpose of Measurement Set

The American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI®) formed an Adult Major Depressive Disorder (MDD) Work Group to identify and define quality measures toward improving outcomes for patients with MDD. This work represents the formal periodic review and maintenance of an existing measurement set.

Reasons for Prioritizing Improvement in Adult Major Depressive Disorder *High Impact Topic Area*

Prevalence and Incidence:

- Major depressive disorder affects approximately 14.8 million American adults, or about 6.7 percent of the U.S. population aged 18 and older in a given year.¹
- While major depressive disorder can develop at any age, the median age at onset is 32.¹
- Major depressive disorder is more prevalent in women than in men.¹
- Depressive disorders are more common among persons with chronic conditions (eg, obesity, cardiovascular disease, diabetes, asthma, arthritis, and cancer) and among those with unhealthy behaviors (eg, smoking, physical inactivity, and binge drinking).²

Disability:

- Major Depressive Disorder is the leading cause of disability in the U.S. for ages 15-44.¹

Disparities:

- Non-Hispanic blacks, Hispanics, and non-Hispanic persons of other races are more likely to report major depression than non-Hispanic whites, based on responses to the Patient Health Questionnaire 8 (PHQ-8), which covers eight of the nine criteria from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) for diagnosis of major depressive disorder.²
- For individuals who experienced a depressive disorder in the past year, 63.7% of Latinos, 68.7% of Asians, and 58.8% of African Americans, compared with 40.2% of non-Latino whites, did not access any mental health treatment in the past year.³

Suicide:

- Research has shown that more than 90% of people who kill themselves have depression or another diagnosable mental or substance abuse disorder.
http://www.allaboutdepression.com/gen_27.html - 3⁴
- Depression is the cause of over two-thirds of the 30,000 reported suicides in the U.S. each year.⁵
- The suicide rate for older adults is more than 50% higher than the rate for the nation as a whole. Up to two-thirds of older adult suicides are attributed to untreated or misdiagnosed depression.⁵

Special Populations: Geriatrics:

- The rate of depression in adults older than 65 years of age ranges from 7% to 36% in medical outpatient clinics and increases to 40% in the hospitalized elderly.⁶
- Comorbidities are more common in the elderly. The highest rates of depression are found in those with strokes (30% to 60%), coronary artery disease (up to 44%), cancer (up to 40%), Parkinson's disease (40%), and Alzheimer's disease (20% to 40%).⁶

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Toward Improving Outcomes for Adult Patients with Major Depressive Disorder

- Similar to other groups, the elderly with depression are more likely than younger patients to underreport depressive symptoms.⁶

Rigorous Clinical Evidence Base

Evidence-based clinical practice guidelines are available for MDD. This measurement set is based on guidelines from:

- American Psychiatric Association (APA)
- Department of Veterans Affairs/Department of Defense (VA/DoD)
- American Diabetes Association (ADA)

Major Depressive Disorder Outcomes

Ideally, a set of measures for patients with major depressive disorder will include both measures of outcomes as well as measures of processes that are known to positively influence desirable outcomes.

Desired outcomes for major depressive disorder include:

1. Reduce depressive symptoms and achieve remission
2. Reduce hospital readmissions and prevent relapse
3. Decrease morbidity and mortality
4. Improve general medical health
5. Increase treatment effectiveness
6. Attain highest quality and quantity of life after onset of illness
7. Improve functional status
8. Reduce delays in MDD treatment
9. Promote shared decision making between patient, family, and clinician
10. Increase clinician communication and patient/family satisfaction

Adult Major Depressive Disorder Work Group Recommendations

The recommended measures below may be used for quality improvement and accountability.

Measures addressing underuse of effective services (evaluation and treatment strategies)

Measure #1: Comprehensive Depression Evaluation: Diagnosis and Severity

This measure is stewarded by the American Psychiatric Association.

Measures addressing safety

Measure #2: Adult Major Depressive Disorder (MDD): Suicide Risk Assessment

Measures addressing patient-centered care

Measure #3: Patient Education

This measure is stewarded by the American Psychiatric Association.

Measure #7: Coordination of Care of Patients with Specific Comorbid Conditions

This measure is stewarded by the American Psychiatric Association.

Measures addressing timely care

Measure #4: Treatment for Depression

This measure is stewarded by the American Psychiatric Association.

Measure #5: Depression Care Follow Up: Three Visits in 90 Days following Diagnosis

This measure is stewarded by the American Psychiatric Association.

Measure #6: Depression Care Follow Up: Assessment of Response to Treatment

This measure is stewarded by the American Psychiatric Association.

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Other Potential Measures

The Work Group considered several other potential measures, though ultimately determined that they were not appropriate for inclusion in the measure set.

Measure Harmonization

When existing hospital-level or plan-level measures are available for the same measurement topics, the PCPI attempts to harmonize the measures to the extent feasible.

Technical Specifications

There are several data sources available for collecting performance measures; generally different data sources require different sets of measure specifications, due to the structure of the systems storing the data.

Quality measure technical specifications for administrative data sources are developed with administrative code sets – ICD-9-CM, ICD-10-CM, CPT, for example. A measure intended for administrative data source use or reporting may have significant differences in the specifications due to the nature of the various data sources. In administrative data sources, administrative or billing codes are typically used to identify eligible populations and reported immediately following the provision of care.

Quality measure technical specifications for electronic data sources are developed in alignment with national standards for clinical quality measures. Based on a measure's intended data sources, coding terminology recommendations and tools are used to create specifications to allow for clinical quality measure reporting. In electronic clinical data sources, data can be aggregated over a specific time period and also allow for greater ability to express certain types of data through use of the recommended terminologies for electronic sources.

The Centers for Medicare and Medicaid Services (CMS) developed *A Blueprint for the Measures Management System*, which provides guidance related to the development, implementation, and maintenance of clinical quality measures. Specific to eQMs, this resource includes the recommended vocabularies used to develop the value sets used in the measures. The Blueprint can be found at the following webpage: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/MMS/MeasuresManagementSystemBlueprint.html>

When expressing clinical concepts found within a measure, specifically for those electronically specified, the Value Set Authority Center (VSAC) is used as a repository for the value sets. The VSAC serves as a repository for value sets in various stages of development, from draft to published, and allows for maintenance of value sets as updates are made to terminologies. It also allows measure developers to search for value sets currently in the VSAC and stewarded by another organization which could potentially be reused in a measure, as an effort towards harmonization with existing value sets so as not to duplicate value sets already in use with the same or similar clinical concepts. The VSAC can be accessed at the following webpage: <https://vsac.nlm.nih.gov/>

The Quality Data Model (QDM) is a framework used to categorize clinical concepts used in quality measures, as well as the relationships among them for electronic specification. The QDM allows for an Health Quality Measures Format (HQMF) rendering of logic using the Measure Authoring Tool (MAT) to express complex measure logic, and subsequently export measures in several formats, currently including a human-readable document, which can be viewed in a web browser, and the XML. Links to these tools are found below:

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QDM: <https://ecqi.healthit.gov/qdm>

MAT: <https://www.emeasuretool.cms.gov/>

CMS and the Office of the National Coordinator for Health IT (ONC) host a website, the Electronic Clinical Quality Information Resource Center (eCQI Resource Center), which is designed to serve as a one-stop shop for all resources related to eCQM development.

The eCQI Resource Center can be accessed at: <https://ecqi.healthit.gov/ecqm>

Testing and Implementation of the Measurement Set

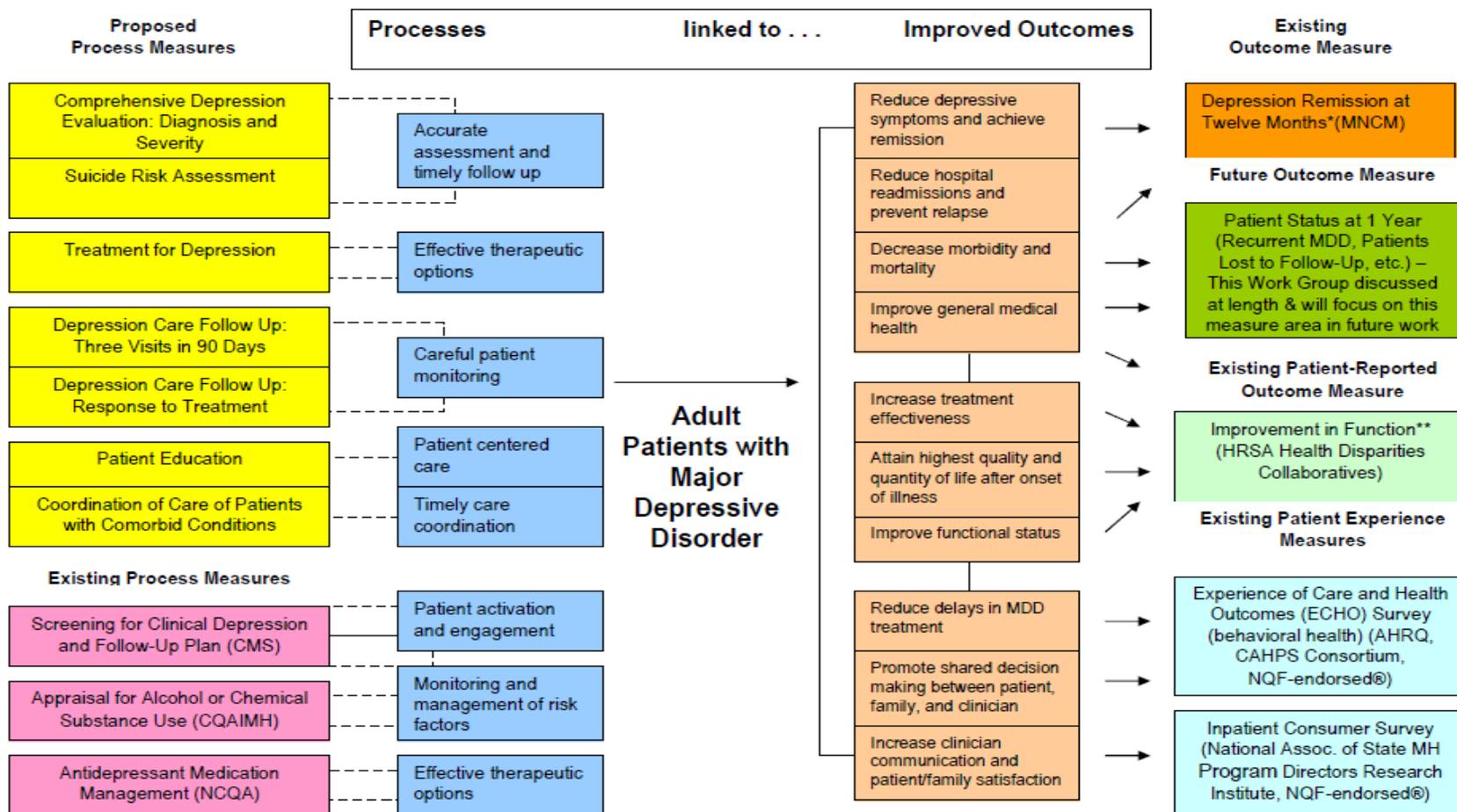
The AMA-convened PCPI collaborated on a testing project in 2012 to ensure the Adult Major Depressive Disorder (MDD) Suicide Risk Assessment measure is reliable and evaluated for accuracy of the measure numerator and denominator case identification. The testing project was conducted utilizing electronic health record data. Parallel forms reliability was tested. Three sites participated in the parallel forms testing of the measure. Site A was a regional extension center comprised of a network of community health centers with 4,065 providers. Site B was a physician-owned private practice in an urban setting. Site C was a non-profit community mental health center with 5 psychiatrists, 30 therapists and 4 nurse practitioners.

Executive Summary: Toward Improving Outcomes for Adult Patients with Major Depressive Disorder

Links to Outcomes:

The proposed measures focus on appropriate evaluation and management of major depressive disorder and associated symptoms, increasing patient awareness and participation in treatment decisions, care coordination, and promoting and enhancing patient safety. These measures can help guide treatment, decrease potentially preventable harmful events, lead to higher levels of personal functioning, and ease patient and caregiver burden through referrals to additional sources for support.

Settings: • **Ambulatory Care (Primary Care, Mental Health, Day Treatment)**



*Our Work Group originally developed a measure on Remission for Depression which was removed due to challenges to feasibility and to the ability to capture the data required to report on the measure. The MNCM measure listed here defines remission as a PHQ-9 score of less than 5. Our Work Group stresses that to definitively determine remission, a clinical interview is required.
 **This HRSA measure utilizes question 10 from the PHQ-9 to help assess patient functioning which our Work Group discussed as one option (but not the only option) to capture this important aspect of care. The group noted the APA's guidance on the use of such measurement tools: "Self-rated scales are convenient to use but require review, interpretation, and discussion with the patient."

Purpose of the Measurement Set:

The American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI®) and the American Psychiatric Association (APA) formed an Adult Major Depressive Disorder (MDD) Work Group to identify and define quality measures toward improving outcomes for adult patients with major depressive disorder in ambulatory settings where patients with MDD receive treatment (ie, primary care, mental health, and day treatment). These measures do not apply to patients with dysthymia, minor depression, or depressive symptoms not reaching the threshold for MDD; rather, the measure set is intended for patients who meet criteria for MDD. The Work Group aimed to develop a comprehensive set of measures that support the efficient delivery of high quality health care in each of the Institute of Medicine's (IOM) six aims for quality improvement (safe, effective, patient-centered, timely, efficient, and equitable).

The current measure development project aimed to review and update these existing Adult MDD measures to ensure that they reflect the latest guideline recommendations, address areas most in need of performance improvement, and incorporate results from testing projects, where existent. The Work Group also looked to the development of new measures with particular attention to exploring the development of outcome and composite or bundled measures. The Work Group composition is balanced and reflects different medical specialties and non-physician professionals. The team includes Work Group members from the fields of psychiatry, endocrinology, primary care, geriatrics, family medicine, internal medicine, methodology, nursing, psychiatric nursing, social work, psychology, occupational therapy, pharmaceutical science, a health plan representative, and a patient representative.

Importance of Topic

Prevalence and Incidence:

- Major depressive disorder affects approximately 14.8 million American adults, or about 6.7 percent of the U.S. population aged 18 and older in a given year.¹
- While major depressive disorder can develop at any age, the median age at onset is 32.¹
- Major depressive disorder is more prevalent in women than in men.¹
- Depressive disorders are more common among persons with chronic conditions (eg, obesity, cardiovascular disease, diabetes, asthma, arthritis, and cancer) and among those with unhealthy behaviors (eg, smoking, physical inactivity, and binge drinking).²

Disability:

- Major Depressive Disorder is the leading cause of disability in the U.S. for ages 15-44.¹

Suicide:

- Research has shown that more than 90% of people who kill themselves have depression or another diagnosable mental or substance abuse disorder.http://www.allaboutdepression.com/gen_27.html - 3⁴
- Depression is the cause of over two-thirds of the 30,000 reported suicides in the U.S. each year.⁵
- The suicide rate for older adults is more than 50% higher than the rate for the nation as a whole. Up to two-thirds of older adult suicides are attributed to untreated or misdiagnosed depression.⁵

Disparities:

- Non-Hispanic blacks, Hispanics, and non-Hispanic persons of other races are more likely to report major depression than non-Hispanic whites, based on responses to the Patient Health Questionnaire 8 (PHQ-8), which covers eight of the nine criteria from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) for diagnosis of major depressive disorder.²
- For individuals who experienced a depressive disorder in the past year, 63.7% of Latinos, 68.7% of Asians, and 58.8% of African Americans, compared with 40.2% of non-Latino whites, did not access any mental health treatment in the past year.³

Special Populations: Geriatrics:

- The rate of depression in adults older than 65 years of age ranges from 7% to 36% in medical outpatient clinics and increases to 40% in the hospitalized elderly.⁶
- Comorbidities are more common in the elderly. The highest rates of depression are found in those with strokes (30% to 60%), coronary artery disease (up to 44%), cancer (up to 40%), Parkinson's disease (40%), and Alzheimer's disease (20% to 40%).⁶
- Similar to other groups, the elderly with depression are more likely than younger patients to underreport depressive symptoms.⁶

Opportunity for Improvement

The Quality of Health Care Delivered to Adults in the United States: Depression⁷

In a large study of the quality of health care delivered to adults in the United States, McGlynn and colleagues (2003) analyzed results from a telephone survey of a random sample of adults from 12 metropolitan areas. In total, 439 quality indicators across 30 acute and chronic conditions were evaluated. On average, patients with depression received the recommended quality of care only about 57.7 percent of the time. The indicators were derived from RAND's Quality Assessment Tool system. Among the lowest performing indicators were:

- If the diagnosis of depression is made, the presence or absence of alcohol or other drug abuse should be documented (n=261)—Observed Adherence to Indicator 28.17%
- Presence or absence of suicidal ideation should be documented during the first or second diagnostic visit (n=294)—Observed Adherence to Indicator 25.8%
- Medication treatment visits or telephone contacts should occur at least once in the 2 weeks following initial diagnosis (n=218)—Observed Adherence to Indicator 25.77%
- Patients with major depression who have medical record documentation of improvement of symptoms within 6 weeks of starting antidepressant treatment should be continued on an antidepressant for at least 4 additional months (n=203)—Observed Adherence to Indicator 41.2%
- If the diagnosis of depression is made, general medical co-morbidities should be elicited and documented in the chart (n=261)—Observed Adherence to Indicator 55.59%

The Effect of Adherence to Practice Guidelines on Depression Outcomes⁸

Hepner and colleagues (2007) estimated guideline recommendations adherence and assessed whether following guideline recommendations is linked to improved depression outcomes. Using data collected from 45 primary care clinics in the United States representing 1131 primary care patients with depression, they found that greater adherence to practice guidelines significantly predicted fewer depressive symptoms. Overall, adherence to guidelines was high for one third of the recommendations that were measured but was very low for nearly half of the measures. Quality review criteria was based on AHRQ guidelines that were subsequently refined through an expert panel process. Among the indicators deemed **high need** for quality improvement were:

- Treatment adjustment among nonresponsive patients (n=640)—Observed Adherence to Indicator 38%
- Depression history and symptom assessment by PCP (n=1131)—Observed Adherence to Indicator 34%
- Treatment for suicidal ideation among patients not already followed in mental health care (n=246)—Observed Adherence to Indicator 28%
- Suicide assessment by PCP (n=1131)—Observed Adherence to Indicator 24%
- Alcohol assessment by PCP (n=1131)—Observed Adherence to Indicator 23%

The Quality of Care for Depressive and Anxiety Disorders in the United States⁹

In a study on the quality of care for depressive and anxiety disorders, Young and colleagues (2001) analyzed data from a cross-sectional survey conducted during 1997 and 1998 with a national sample. Respondents consisted of 1636 adults with a probable 12-month depressive or anxiety disorder as determined by brief diagnostic interview. Appropriate treatment was defined as present if the respondent had used medication or counseling that was consistent with treatment guidelines. For those diagnosed with depression, it was deemed that only 15.6%

received appropriate medication treatment, and only 14.8% received appropriate counseling treatment. In all, of those diagnosed with depression 77.7% had any primary care practitioner visit over the past year, and only 17.7% had any mental health specialist visit over the past year.

Psychiatric Practice Variations in the Diagnosis and Treatment of Major Depression¹⁰

In a 2000 study on psychiatric practice variation in the diagnosis and treatment of major depression, six psychiatric clinics participating in a national outcomes-management project provided diagnostic and scale survey information on a total of 5,106 patients. Variation among the practices was found to be significant. Although 73.1 to 77 percent of patients screened positive for a depressive disorder, only 18.5 to 36.8 percent were diagnosed with major depression ($p < .001$). Between 39 and 72 percent of patients received psychotropic medications, a significant difference across sites ($p < .001$). In addition, the number of psychotherapy sessions was significantly different across sites ($p < .001$).

Adherence to Practice Guidelines, Clinical Outcomes, and Costs Among Medicaid Enrollees With Severe Mental Illness¹¹

In a 2009 study, the treatment of Medicaid enrollees diagnosed with depression or schizophrenia was examined to determine whether adherence to treatment guideline was associated with health care financing strategy, clinical outcomes, and cost-effectiveness. Individuals in a fee-for-service condition were significantly more likely to receive treatment consistent with guidelines than those in managed care. The determination of guideline adherence was determined based on the use of the American Psychiatric Association's 2000 *Practice Guideline for the Treatment of Patients With Major Depressive Disorder*.

Disparities:

Racial and Ethnic Variations in Depression Care in the United States¹²

In a study on variations in depression care across racial and ethnic groups in the United States, Gonzalez and colleagues (2010) analyzed data from the Collaborative Psychiatric Epidemiology Survey (CPES). The nationally-representative sample included 15,762 participants who were 18 years and older. A determination of guideline-concordant care was based on the American Psychiatric Association's 2000 *Practice Guideline for the Treatment of Patients With Major Depressive Disorder*. The findings were striking, namely that Mexican American and African American individuals meeting 12-month major depression criteria consistently and significantly had lower odds for any depression therapy and guideline-concordant therapies despite depression severity ratings not significantly differing between ethnic/racial groups. Gonzalez and colleagues found that few Americans with recent major depression have used depression therapies and guideline-concordant therapies; however, the lowest rates of use were found among Mexican American and African American individuals. Ethnic/racial differences were found despite comparable depression care need. More Americans with recent major depression used psychotherapy over pharmacotherapy, and these differences were most pronounced among Mexican American and African American individuals.

The PCPI believes that performance measure data should be stratified by race, ethnicity, and primary written and spoken language to assess disparities and initiate subsequent quality improvement activities addressing identified disparities. These categories are consistent with recent national efforts to standardize the collection of race and ethnicity data. A 2008 National Quality Forum (NQF) report endorsed 45 practices including stratification by the aforementioned variables. A 2009 Institute of Medicine (IOM) report "recommends collection of the existing Office of Management and Budget (OMB) race and Hispanic ethnicity categories as well as more fine-grained categories of ethnicity (referred to as granular ethnicity and based on one's ancestry) and language need (a rating of spoken English language proficiency of less than very well and one's preferred language for health-related encounters)."¹³

Clinical Evidence Base

Evidence-based clinical practice guidelines are available for MDD. This measurement set is based on guidelines from:

- American Psychiatric Association (APA)
- Department of Veterans Affairs/Department of Defense (VA/DoD)
- American Diabetes Association (ADA)

These guidelines meet all of the required elements and many, if not all, of the preferred elements outlined in a recent PCPI position statement establishing a framework for consistent and objective selection of clinical practice guidelines from which PCPI Work Groups may derive clinical performance measures. Clinical practice guidelines serve as the foundation for the development of performance measures. Performance measures, however, are not clinical practice guidelines and cannot capture the full spectrum of care for all patients with MDD. The guideline principles with the strongest recommendations and often highest level of evidence (well-designed randomized-controlled trials) served as the basis for measures in this set.

Adult Major Depressive Disorder Outcomes

Ideally, a set of measures for patients with major depressive disorder will include both measures of outcomes as well as measures of processes that are known to positively influence desirable outcomes. Desired outcomes for major depressive disorder include:

1. Reduce depressive symptoms and achieve remission
2. Reduce hospital readmissions and prevent relapse
3. Decrease morbidity and mortality
4. Improve general medical health
5. Increase treatment effectiveness
6. Attain highest quality and quantity of life after onset of illness
7. Improve functional status
8. Reduce delays in MDD treatment
9. Promote shared decision making between patient, family, and clinician
10. Increase clinician communication and patient/family satisfaction

Intended Audience, Care Setting, and Patient Population

The PCPI encourages use of these measures by physicians, other health care professionals, and healthcare systems, where appropriate, to manage the care for patients aged 18 years and older with a diagnosis of major depressive disorder. These measures do not apply to patients with dysthymia, minor depression, or depressive symptoms not reaching the threshold for MDD; rather, the measure set is intended for patients who meet criteria for MDD. These measures are meant to be used to calculate performance and/or reporting at the practitioner level. Performance measurement serves as an important component in a quality improvement strategy but performance measurement alone will not achieve the desired goal of improving patient care. Measures can have their greatest effect when they are used judiciously and linked directly to operational steps that clinicians, patients, and health plans can apply in practice to improve care. The Work Group attempted to develop measures that would be relevant in ambulatory settings where patients with MDD receive treatment (eg, primary care, mental health, and day treatment). Where the term clinician is used in the set, it is defined as a practitioner who is qualified to diagnose and treat depression.

Adult Major Depressive Disorder Work Group Recommendations

This measurement set includes measures that focus on appropriate evaluation and management of major depressive disorder and associated symptoms, increasing patient awareness and participation in treatment

decisions, care coordination, and promoting and enhancing patient safety. These measures can help guide treatment, decrease potentially preventable harmful events, lead to higher levels of personal functioning, and ease patient and caregiver burden through referrals to additional sources for support.

The Adult Major Depressive Disorder Work Group focused on current quality gaps in care in order to identify processes that could potentially improve patient outcomes for patients with major depressive disorder. The Links to Outcomes table illustrates how each measure is linked to a process, which may eventually lead to an improved outcome.

These clinical performance measures are designed primarily for practitioner level quality improvement to achieve better outcomes for patients with the aforementioned diagnoses. These measures are appropriate for accountability if the appropriate methodological, statistical, and implementation rules are achieved.

The measures listed below may be used for quality improvement and accountability.

Measures addressing underuse of effective services (evaluation and treatment strategies)

Measure #1: Comprehensive Depression Evaluation: Diagnosis and Severity

Measures addressing safety

Measure #2: Suicide Risk Assessment

Measures addressing patient-centered care

Measure #3: Patient Education

Measure #7: Coordination of Care of Patients with Specific Comorbid Conditions

Measures addressing timely care

Measure #4: Treatment for Depression

Measure #5: Depression Care Follow Up: Three Visits in 90 Days following Diagnosis

Measure #6: Depression Care Follow Up: Assessment of Response to Treatment

These measures also support the efficient delivery of high quality health care in many of the Institute of Medicine’s (IOM) six aims for quality improvement as described in the following table:

IOM Domains of Health Care Quality		Safe	Effective		Patient-centered	Timely	Efficient	Equitable
			Underuse	Overuse				
	Measures							
1	Comprehensive Depression Evaluation: Diagnosis and Severity		√		√	√		√
2	Suicide Risk Assessment	√	√		√	√		√
3	Patient Education		√		√	√		√
4	Treatment for Depression				√	√	√	√
5	Depression Care Follow Up: Three Visits in 90 Days following Diagnosis	√	√		√	√		√
6	Depression Care Follow Up: Assessment of Response to Treatment	√	√		√	√		√
7	Coordination of Care of Patients with Specific Comorbid Conditions	√	√		√	√		√

Retired Measures

A number of circumstances might warrant the retirement of a measure from a measurement set including, but not limited to:

- The measure no longer remains clinically relevant/appropriate as determined by current guidelines and scientific evidence
- To avoid excessive clinician burden, other performance measures, such as outcome measures, may take precedence
- High clinician performance, implying that the measure no longer represents an opportunity for quality improvement
- Testing results demonstrating poor feasibility of data collection or weak correlation with improved health outcomes
- Identification of significant unintended consequences of measurement.

No measures were retired as a part of review and maintenance of this measures set. However, the Work Group decided to combine the Diagnostic Evaluation measure with the Severity Classification measure since they are closely related and should be completed at the same time.

Other Potential Measures

The Work Group considered several other potential measures, though ultimately determined that they were not appropriate for inclusion in the measure set.

- Recurrent MDD
- Patient Status at 1 Year/Patients Lost to Follow Up
- Remission from Depression

The Work Group had discussed developing a performance measure on Recurrent MDD but felt the metric would be too complicated due in part to variations in defining and documenting remission from depression. To definitively determine remission, a clinical interview is required. In addition to a clinical interview, a determination of remission can be aided by the presence of certain scores for particular depression severity rating scales; however, the APA guideline is clear that the use of such measurement tools requires review, interpretation, and discussion with the patient. In addition to the difficulty in measuring remission, the Work Group raised the issue of patients who become “lost to follow up,” loosely defined as patients who are unresponsive to outreach (ie, phone calls, letters, emails) from the clinician’s office after initial treatment. The group explored the question of how to adequately measure remission rates when many patients, once they feel better, do not return for follow-up treatment. The group also discussed how to track such patients, and all patients, to attempt measurement of Patient Status at 1 Year. The group felt it would be advantageous to look at how patients are doing one year after diagnosis of MDD; initial categories proposed included patients in remission, patients who died, patients remaining with active symptoms of MDD, and patients lost to follow-up. Performance measures of this type that have been developed for other topics, such as PCPI’s Reminder System for Mammograms, were not tremendously helpful since it was thought that follow-up procedures in physician offices that treat patients with MDD varied too widely for use of a standard performance measure. The challenge of developing a clear, understandable, useful metric of this sort proved too difficult, and the measure was tabled until the next maintenance cycle of this performance measure set.

While each performance measure is intended to support quality improvement in one or more of the IOM domains (safe, effective, patient centered, timely, efficient, and equitable), the development of composite and outcome measures proved more difficult. Composite measures were discussed and may be included in future measure sets. The Work Group originally agreed on just one outcome measure for the set, Remission from Depression, but did not feel that it was ready for use as an accountability measure. Measuring remission was deemed critically

important but developing a risk adjustment methodology in order to judge the performance of all clinicians with vastly different patient populations proved too complicated. The group also felt that gathering data first on remission rates in different office settings and geographic locations would make this measure more useful in the future. Therefore, the Work Group initially decided this measure should be developed for quality improvement only until the data can be gathered to develop a risk adjustment methodology for use in an accountability measure. After public comment, however, it was noted that there were challenges to feasibility and to the ability to capture the data required to report on the measure. Because of these concerns, the group felt that it would not be appropriate to move forward with the measure at this time, but will look toward the development of an outcome measure in the future when the availability of the information required in an electronic format has advanced.

Additional Measures Referenced (Measures Not Developed by PCPI)

The Adult MDD Work Group discussed three existing accountability and quality improvement measures that may be optimally suited for implementation with all the other measures in this set. The topics of all three measures were being developed by the Work Group and went out for public comment until it was noted that very similar measures had been included in CMS's Electronic Health Record Incentive Program—eMeasures for 2014 electronic Clinical Quality Measures (eCQM) reporting. In addition, two of the three measures are in current use in CMS's Physician Quality Reporting System (PQRS). Therefore, instead of continuing to develop measures that are very similar to measures already in use in national programs, the Work Group recommended that three measures not developed by PCPI be referenced within this measure set, Measure #8: (CQAIMH) Appraisal for Alcohol or Chemical Substance Use, Measure #9: (NCQA) Antidepressant Medication Management, and Measure #10: (CMS) Screening for Clinical Depression and Follow-Up Plan. To promote a comprehensive approach to performance improvement, the Adult MDD measure set is intended for use in its entirety when measuring clinical quality in the care of eligible patients. Full implementation of this measurement set for patients with a diagnosis of MDD should always include Appraisal for Alcohol or Chemical Substance Use, Antidepressant Medication Management, and Screening for Clinical Depression and Follow-Up Plan or similar measures.

Measure Harmonization

When existing hospital-level or plan-level measures are available for the same measurement topics, the PCPI attempts to harmonize the measures to the extent feasible. When creating our measures of Depression Care Follow Up, the Work Group considered similar measures from the Health Resources and Services Administration (HRSA) Health Disparities Collaboratives, and Minnesota Community Measurement; however the ultimate decision was not to harmonize with these measures due to their requirement that a particular measurement tool be used for the assessment. Although the APA guideline discusses incorporating validated measurement tools into physician practice for diagnosing and monitoring of MDD, no one instrument or rating scale is endorsed by the guideline. The Work Group felt it was important to give physicians and other health care professionals the flexibility of using any validated tool or no instrument at all. Furthermore, to definitively determine a patient's response to treatment or remission, a clinical interview is required. In addition to a clinical interview, a determination of response to treatment or remission can be aided by the presence of certain scores for particular depression severity rating scales; however, the APA guideline is clear that the use of such measurement tools requires review, interpretation, and discussion with the patient.

Technical Specifications: Overview

There are several data sources available for collecting performance measures; generally different data sources require different sets of measure specifications, due to the structure of the systems storing the data.

Quality measure technical specifications for administrative data sources are developed with administrative code sets – ICD-9-CM, ICD-10-CM, CPT, for example. A measure intended for administrative data source use or reporting

may have significant differences in the specifications due to the nature of the various data sources. In administrative data sources, administrative or billing codes are typically used to identify eligible populations and reported immediately following the provision of care.

Quality measure technical specifications for electronic data sources are developed in alignment with national standards for clinical quality measures. Based on a measure's intended data sources, coding terminology recommendations and tools are used to create specifications to allow for clinical quality measure reporting. In electronic clinical data sources, data can be aggregated over a specific time period and also allow for greater ability to express certain types of data through use of the recommended terminologies for electronic sources.

The Centers for Medicare and Medicaid Services (CMS) developed *A Blueprint for the Measures Management System*, which provides guidance related to the development, implementation, and maintenance of clinical quality measures. Specific to eQMs, this resource includes the recommended vocabularies used to develop the value sets used in the measures. The Blueprint can be found at the following webpage:

<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/MMS/MeasuresManagementSystemBlueprint.html>

When expressing clinical concepts found within a measure, specifically for those electronically specified, the Value Set Authority Center (VSAC) is used as a repository for the value sets. The VSAC serves as a repository for value sets in various stages of development, from draft to published, and allows for maintenance of value sets as updates are made to terminologies. It also allows measure developers to search for value sets currently in the VSAC and stewarded by another organization which could potentially be reused in a measure, as an effort towards harmonization with existing value sets so as not to duplicate value sets already in use with the same or similar clinical concepts. The VSAC can be accessed at the following webpage: <https://vsac.nlm.nih.gov/>

The Quality Data Model (QDM) is a framework used to categorize clinical concepts used in quality measures, as well as the relationships among them for electronic specification. The QDM allows for an Health Quality Measures Format (HQMF) rendering of logic using the Measure Authoring Tool (MAT) to express complex measure logic, and subsequently export measures in several formats, currently including a human-readable document, which can be viewed in a web browser, and the XML.

Links to these tools are found below:

QDM: <https://ecqi.healthit.gov/qdm>

MAT: <https://www.emasuretool.cms.gov/>

CMS and the Office of the National Coordinator for Health IT (ONC) host a website, the Electronic Clinical Quality Information Resource Center (eCQI Resource Center), which is designed to serve as a one-stop shop for all resources related to eCQM development.

The eCQI Resource Center can be accessed at: <https://ecqi.healthit.gov/ecqm>

Measure Exclusions and Exceptions

Measure Exclusions

The PCPI distinguishes between measure exceptions and measure exclusions. Exclusions arise when the intervention required by the numerator is not appropriate for a group of patients who are otherwise included in the initial patient or eligible population of a measure (ie, the denominator). Exclusions are absolute and are to be removed from the denominator of a measure and therefore clinical judgment does not enter the decision.

Measure Exceptions

Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences.

For ***process measures***, the PCPI provides two categories of reasons for which a patient may be excluded from the denominator of an individual measure:

- **Medical reasons**

Include:

- Contraindicated in patient (potential allergy due to previous reported allergic history, potential adverse drug interaction, other)
- Already received/performed
- Intolerant (therapy was tried and the patient was intolerant)
- Other medical reason(s)

- **Patient or Non-medical reason(s)**

Include:

- Patient refused/declined
- Access issues or insurance coverage/payor-related limitations (patient not covered for treatment)
- Patient preference: Social reason(s) (eg, family or support system not supportive of intervention/treatment); Religious reason(s) (eg, religious beliefs regarding blood transfusion)
- Other patient or non-medical reason(s)

These measure exception categories are not available uniformly across all measures; for each measure, there must be a clear rationale to permit an exception for a medical or patient/non-medical reason. For some measures, examples have been provided in the measure exception language of instances that would constitute an exception. Examples are intended to guide clinicians and are not all-inclusive lists of all possible reasons why a patient could be excluded from a measure. There are different approaches for reporting measure exceptions, depending on whether the measure is being reported from an electronic clinical data source or an administrative data source.

Electronic Clinical Data Sources:

Value sets are included in the electronic clinical data source specifications for Medical Reason and Patient Reason. These have been specified in SNOMED-CT and include a broad list of reasons that pertain to each type of exception and cover various situations. The contents of these value sets are broad, and facilitate re-use of the Medical and Patient Reason value sets across measurement sets.

Administrative Data Sources

Exceptions reported from administrative data sources can be reported using a Quality Data Code (QDC), which may be a CPT Category II code or a G-code.

Where CPT Category II codes are used, the exception of a patient may be reported by appending the appropriate modifier to the CPT Category II code designated for the measure:

- **Medical reasons**: modifier 1P
- **Patient reasons**: modifier 2P

Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the *specific* reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each physician's exceptions data to identify practice patterns and opportunities for quality improvement. For example, it is possible for implementers to calculate the percentage of patients that physicians have identified as meeting the criteria for exception.

Please refer to documentation for each individual measure for information on the acceptable exception categories and the codes and modifiers to be used for reporting.

Testing and Implementation of the Measurement Set

The AMA-convened PCPI collaborated on a testing project in 2012 to ensure the Adult Major Depressive Disorder (MDD) Suicide Risk Assessment measure is reliable and evaluated for accuracy of the measure numerator and denominator case identification. The testing project was conducted utilizing electronic health record data. Parallel forms reliability was tested. Three sites participated in the parallel forms testing of the measure. Site A was a regional extension center comprised of a network of community health centers with 4,065 providers. Site B was a physician-owned private practice in an urban setting. Site C was a non-profit community mental health center with 5 psychiatrists, 30 therapists and 4 nurse practitioners.

Measures Tested

- Adult Major Depressive Disorder (MDD) - Suicide Risk Assessment

Reliability Testing

The purpose of reliability testing was to evaluate whether the measure definitions and specifications, as prepared by the PCPI, yield stable, consistent measures. Data abstracted from electronic health records were used to calculate parallel forms reliability for the measure.

Reliability Testing Results

Adult Major Depressive Disorder (MDD) - Suicide Risk Assessment

Parallel Forms Reliability Testing (Site A, B and C)

There were 120 observations from three sites used for the denominator analysis. The kappa statistic value of 0.80 demonstrates substantial agreement between the automated report and reviewer.

Of the 120 observations that were initially selected, 117 observations met the criteria for inclusion in the numerator analysis. The kappa statistic value of 0.37 demonstrates fair agreement between the automated report and reviewer.

Reliability: N, % Agreement, Kappa (95% Confidence Interval)

Denominator: 120, 99.17%, 0.80 (0.40, 1.00)

Numerator: 117, 66.67%, 0.37 (0.20-0.53)*

*This is an example of the limitation of the Kappa statistic. While the agreement can be 90% or greater, if one classification category dominates, the Kappa can be significantly reduced (<http://www.ajronline.org/cgi/content/full/184/5/1391>).

Measure #1 has been removed from this document

Comprehensive Depression Evaluation

Measure #1: Comprehensive Depression Evaluation: Diagnosis and Severity

This measure is stewarded by the American Psychiatric Association. It has been removed from this document.

Measures Transitioned to the American Psychiatric Association (APA)

The Adult Major Depressive Disorder measures transitioned to APA are available at: www.psychiatry.org

All APA inquiries may be sent to:

Measure #2: Adult Major Depressive Disorder (MDD): Suicide Risk Assessment

Measure Description

Percentage of patients aged 18 years and older diagnosis of major depressive disorder (MDD) with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified

Measure Components

Numerator Statement	<p>Patients with a suicide risk assessment* completed during the visit in which a new diagnosis or recurrent episode was identified</p> <p>* Suicide risk assessment must include questions about the following:</p> <ol style="list-style-type: none"> 1) Suicidal ideation 2) Patient's intent of initiating a suicide attempt <p>AND, if either is present,</p> <ol style="list-style-type: none"> 3) Patient plans for a suicide attempt 4) Whether the patient has means for completing suicide
Denominator Statement	<p>All patients aged 18 years and older with a diagnosis of major depressive disorder (MDD)</p>
Denominator Exceptions	<p>None</p>
Supporting Guidelines & Other References	<p>The following evidence statements are quoted verbatim from the referenced clinical guidelines. Only selected portions of the clinical guidelines are quoted here; for more details, please refer to the full guideline.</p> <p>A careful and ongoing evaluation of suicide risk is necessary for all patients with major depressive disorder [I]. (APA, 2010¹⁴)</p> <p>Such an assessment includes specific inquiry about suicidal thoughts, intent, plans, means, and behaviors; identification of specific psychiatric symptoms (eg, psychosis, severe anxiety, substance use) or general medical conditions that may increase the likelihood of acting on suicidal ideas; assessment of past and, particularly, recent suicidal behavior; delineation of current stressors and potential protective factors (eg, positive reasons for living, strong social support); and identification of any family history of suicide or mental illness [I]. (APA, 2010¹⁴)</p> <p>As part of the assessment process, impulsivity and potential for risk to others should also be evaluated, including any history of violence or violent or homicidal ideas, plans, or intentions [I]. (APA, 2010¹⁴)</p> <p>The patient's risk of harm to him- or herself and to others should also be monitored as treatment proceeds [I]. (APA, 2010¹⁴)</p>

Guidelines for Selecting a Treatment Setting for Patients at Risk for Suicide or Suicidal Behaviors¹⁵:

Admission generally indicated

After a suicide attempt or aborted suicide attempt if:

- Patient is psychotic
- Attempt was violent, near-lethal, or premeditated
- Precautions were taken to avoid rescue or discovery
- Persistent plan and/or intent is present
- Distress is increased or patient regrets surviving
- Patient is male, older than age 45 years, especially with new onset of psychiatric illness or suicidal thinking
- Patient has limited family and/or social support, including lack of stable living situation
- Current impulsive behavior, severe agitation, poor judgment, or refusal of help is evident
- Patient has change in mental status with a metabolic, toxic, infectious, or other etiology requiring further workup in a structured setting

In the presence of suicidal ideation with:

- Specific plan with high lethality
- High suicidal intent

Admission may be necessary

[In addition to the list above, these additional circumstances may warrant admission]

After a suicide attempt or aborted suicide attempt

In the presence of suicidal ideation with:

- Major psychiatric disorder
 - Past attempts, particularly if medically serious
 - Possibly contributing medical condition (eg, acute neurological disorder, cancer, infection)
 - Lack of response to or inability to cooperate with partial hospital or outpatient treatment
 - Need for supervised setting for medication trial or ECT
 - Need for skilled observation, clinical tests, or diagnostic assessments that require a structured setting
 - Lack of an ongoing clinician-patient relationship or lack of access to timely outpatient follow-up
- [• Evidence of putting one's affairs in order (eg, giving away possessions, writing a will)]

In the absence of suicide attempts or reported suicidal ideation/plan/intent but evidence from the psychiatric evaluation and/or history from others suggests a high level of suicide risk and a recent acute increase in risk

Release from emergency department with follow-up recommendations may be possible

After a suicide attempt or in the presence of suicidal ideation/plan when:

- Suicidality is a reaction to precipitating events (eg, exam failure, relationship difficulties), particularly if the patient’s view of situation has changed since coming to emergency department
- Plan/method and intent have low lethality
- Patient has stable and supportive living situation
- Patient is able to cooperate with recommendations for follow-up, with treater contacted, if possible, if patient is currently in treatment

Outpatient treatment may be more beneficial than hospitalization

Patient has chronic suicidal ideation and/or self-injury without prior medically serious attempts, if a safe and supportive living situation is available and outpatient psychiatric care is ongoing

Measure Importance

Relationship to desired outcome	Research has shown that more than 90% of people who kill themselves have depression or another diagnosable mental or substance abuse disorder. ⁴ Depression is the cause of over two-thirds of the reported suicides in the U.S. each year. ⁵ The intent of this measure is for a clinician to assess suicide risk at initial intake or at visit in which depression was diagnosed. As the guidelines state, it is important to assess for additional factors which may increase or decrease suicide risk, such as presence of additional symptoms (eg, psychosis, severe anxiety, hopelessness, severe chronic pain); presence of substance abuse, history and seriousness of previous attempts, particularly, recent suicidal behavior, current stressors and potential protective factors (eg, positive reasons for living, strong social support), family history of suicide or mental illness or recent exposure to suicide, impulsivity and potential for risk to others, including history of violence or violent or homicidal ideas, plans, or intentions, and putting one’s affairs in order (eg, giving away possessions, writing a will). In addition, although the measure focuses on the initial visit, it is critical that suicide risk be monitored especially for the 90 days following the initial visit and throughout MDD treatment.	
Opportunity for Improvement	Hepner and colleagues (2007) found that primary care physicians (PCPs) assess for suicide only 24% of the time in patients with depression. ⁸ In the same study, only 28% of PCPs adhered to the quality indicator “Treatment for suicidal ideation among patients not already followed in mental health care.” ⁸ McGlynn and colleagues (2003) found that only 25.8% of PCPs document the presence or absence of suicidal ideation during the first or second diagnostic visit. ⁷ The same study showed that only 28.9% of patients who have suicidality and have any of the following risk factors: psychosis, current alcohol or drug abuse or dependency, and specific plans to carry out suicide (eg, obtaining a weapon, putting affairs in order, making a suicide note) are hospitalized. ⁷ Additionally, Luoma and colleagues (2002) found that 40% of patients who completed suicide had seen their primary care physician in the past month. ¹⁶	
IOM Domains of Health Care Quality Addressed	<ul style="list-style-type: none"> • Effective • Timely • Equitable 	<ul style="list-style-type: none"> • Safe • Patient-Centered
Exception Justification	This measure has no exceptions.	

Harmonization with Existing Measures	The PCPI attempts to harmonize measures with other existing measures to the extent feasible. Harmonization was not deemed applicable for this measure.
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Measure Designation

Measure purpose	<ul style="list-style-type: none"> • Quality improvement • Accountability
Type of measure	<ul style="list-style-type: none"> • Process
Level of Measurement	<ul style="list-style-type: none"> • Individual practitioner
Care setting	<ul style="list-style-type: none"> • Ambulatory Care (Primary Care, Mental Health, Day Treatment)
Data source	<ul style="list-style-type: none"> • Electronic Health Record (EHR) data • Prospective Claims-Based Reporting

Measures #3 –#7 have been removed from this document

Patient Education

Measure #3: Patient Education

This measure is stewarded by the American Psychiatric Association. It has been removed from this document.

Treatment for Depression

Measure #4: Treatment for Depression

This measure is stewarded by the American Psychiatric Association. It has been removed from this document.

Depression Care Follow-Up

Measure #5: Depression Care Follow-Up: Three Visits in 90 Days Following Diagnosis

This measure is stewarded by the American Psychiatric Association. It has been removed from this document.

Measure #6: Depression Care Follow-Up: Assessment of Response to Treatment

This measure is stewarded by the American Psychiatric Association. It has been removed from this document.

Coordination of Care of Patients with Specific Comorbid Conditions

Measure #7: Coordination of Care of Patients with Specific Comorbid Conditions

This measure is stewarded by the American Psychiatric Association. It has been removed from this document.

Measures Transitioned to the American Psychiatric Association (APA)

The Adult Major Depressive Disorder measures transitioned to APA are available at: www.psychiatry.org

All APA inquiries may be sent to:

**Additional Measures Included
(Measures Not Developed by PCPI)**

Measure #8: Appraisal for Alcohol or Chemical Substance Use

Bipolar Disorder and Major Depression

Center for Quality Assessment and Improvement in Mental Health (CQAIMH)

The Adult Major Depressive Disorder (MDD) Work Group recommended that this measure, Bipolar Disorder and Major Depression: Appraisal for Alcohol or Chemical Substance Use, developed by the Center for Quality Assessment and Improvement in Mental Health (CQAIMH), be referenced in this document as an accountability and quality improvement measure that addresses the critical area of assessing patients with MDD for alcohol or chemical substance abuse. This measure is included in the Centers for Medicare & Medicaid Services (CMS) Electronic Health Record Incentive Program—eMeasures for 2014 electronic Clinical Quality Measures (eCQM) reporting.

To promote a comprehensive approach to performance improvement, the Adult MDD measurement set is intended for use in its entirety when measuring clinical quality in the care of eligible patients. Full implementation of this measurement set for patients with a diagnosis of MDD should always include Bipolar Disorder and Major Depression: Appraisal for Alcohol or Chemical Substance Use or a similar measure.

A description and technical specifications for this measure can be found on NQF's website:

<http://www.qualityforum.org/QPS/>

Measure #9: Antidepressant Medication Management

Adult Major Depressive Disorder

National Committee for Quality Assurance (NCQA)

The Adult Major Depressive Disorder (MDD) Work Group recommended that this measure, Antidepressant Medication Management, developed by the National Committee for Quality Assurance (NCQA), be referenced in this document as an accountability and quality improvement measure that addresses the critical area of continuation of antidepressant medication for at least 180 days (6 months). This measure is in current use in the Centers for Medicare & Medicaid Services (CMS) Physician Quality Reporting System (PQRS) and included in CMS's Electronic Health Record Incentive Program—eMeasures for 2014 electronic Clinical Quality Measures (eCQM) reporting.

To promote a comprehensive approach to performance improvement, the Adult MDD measurement set is intended for use in its entirety when measuring clinical quality in the care of eligible patients. Full implementation of this measurement set for patients with a diagnosis of MDD should always include Antidepressant Medication Management or a similar measure.

A description and technical specifications for this measure can be found on NCQA's website:

<http://www.ncqa.org/HomePage.aspx>

Measure #10: Screening for Clinical Depression and Follow-Up Plan

Preventive Care and Screening

Centers for Medicare & Medicaid Services (CMS)

National Quality Forum (NQF)-Endorsed®

The Adult Major Depressive Disorder (MDD) Work Group recommended that this measure, NQF #418: Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan, stewarded by the Centers for Medicare & Medicaid Services (CMS), be referenced in this document as an accountability and quality improvement measure that addresses the critical area of screening for depression and follow-up plan. This measure is in current use in the Centers for Medicare & Medicaid Services (CMS) Physician Quality Reporting System (PQRS) and included in CMS's Electronic Health Record Incentive Program—eMeasures for 2014 electronic Clinical Quality Measures (eCQM) reporting.

To promote a comprehensive approach to performance improvement, the Adult MDD measurement set is intended for use in its entirety when measuring clinical quality in the care of eligible patients. Full implementation of this measurement set for patients with a diagnosis of MDD should always include Screening for Clinical Depression and Follow-Up Plan or a similar measure.

A description and technical specifications for this measure can be found on CMS's website:

<http://www.cms.gov/>

EVIDENCE CLASSIFICATION/RATING SCHEMES

American Psychiatric Association (APA). Practice Guideline for the Treatment of Patients With Major Depressive Disorder, Third Edition¹⁴—2010.

Each recommendation is identified as falling into one of three categories of endorsement, indicated by a bracketed Roman numeral following the statement. The three categories represent varying levels of clinical confidence:

- [I] Recommended with substantial clinical confidence
- [II] Recommended with moderate clinical confidence
- [III] May be recommended on the basis of individual circumstances

The following coding system is used to indicate the nature of the supporting evidence in the references:

[A] *Randomized double-blind clinical trial.* A study of an intervention in which subjects are prospectively followed over time, there are treatment and control groups, subjects are randomly assigned to the two groups, both the subjects and the investigators are blind to the assignments.

[A-] *Randomized clinical trial.* Same as above but not double-blind.

[B] *Clinical trial.* A prospective study in which an intervention is made and the results of that intervention are tracked longitudinally; study does not meet standards for a randomized clinical trial.

[C] *Cohort or longitudinal study.* A study in which subjects are prospectively followed over time without any specific intervention.

[D] *Case-control study.* A study in which a group of patients and a group of control subjects are identified in the present and information about them is pursued retrospectively or backward in time.

[E] *Review with secondary data analysis.* A structured analytic review of existing data, eg, a meta-analysis or a decision analysis.

[F] *Review.* A qualitative review and discussion of previously published literature without a quantitative synthesis of the data.

[G] *Other.* Textbooks, expert opinion, case reports, and other reports not included above.

Department of Veteran Affairs, Department of Defense’s Rating Scheme for the Strength of the Evidence & Strength of the Recommendations (VA/DoD clinical practice guideline for management of major depressive disorder¹⁷:

Quality of Evidence (QE)

I	At least one properly done randomized controlled trial
II-1	Well-designed controlled trial without randomization
II-2	Well-designed cohort or case-control analytic study, preferably from more than one source
II-3	Multiple time series evidence with/without intervention, dramatic results of uncontrolled experiment
III	Opinion of respected authorities, descriptive studies, case reports, and expert committees

Overall Quality (OQ)

Good	High grade evidence (I or II-1) directly linked to health outcome
Fair	High grade evidence (I or II-1) linked to intermediate outcome or

	Moderate grade evidence (II-2 or II-3) directly linked to health outcome
Poor	Level III evidence or no linkage of evidence to health outcome

Final Grade of Recommendation

Quality of Evidence	<i>The net benefit of the intervention</i>			
	Substantial	Moderate	Small	Zero or Negative
Good	A	B	C	D
Fair	B	B	C	D
Poor	I	I	I	I

Evidence Rating System

A	A strong recommendation that the clinicians provide the intervention to eligible patients. <i>Good evidence was found that the intervention improves important health outcomes and concludes that benefits substantially outweigh harm.</i>
B	A recommendation that clinicians provide (the service) to eligible patients. <i>At least fair evidence was found that the intervention improves health outcomes and concludes that benefits outweigh harm.</i>
C	No recommendation for or against the routine provision of the intervention is made. <i>At least fair evidence was found that the intervention can improve health outcomes, but concludes that the balance of benefits and harms is too close to justify a general recommendation.</i>
D	Recommendation is made against routinely providing the intervention to asymptomatic patients. <i>At least fair evidence was found that the intervention is ineffective or that harms outweigh benefits.</i>
I	The conclusion is that the evidence is insufficient to recommend for or against routinely providing the intervention. <i>Evidence that the intervention is effective is lacking, or poor quality, or conflicting, and the balance of benefits and harms cannot be determined.</i>

American Diabetes Association evidence grading system for clinical practice recommendations¹⁸

Level of evidence Description

A Clear evidence from well-conducted, generalizable, randomized controlled trials that are adequately powered, including:

- Evidence from a well-conducted multicenter trial
- Evidence from a meta-analysis that incorporated quality ratings in the analysis

Compelling nonexperimental evidence, ie, “all or none” rule developed by Center for Evidence Based Medicine at Oxford

Supportive evidence from well-conducted randomized controlled trials that are adequately powered, including:

- Evidence from a well-conducted trial at one or more institutions
- Evidence from a meta-analysis that incorporated quality ratings in the analysis

B Supportive evidence from well-conducted cohort studies:

- Evidence from a well-conducted prospective cohort study or registry
- Evidence from a well-conducted meta-analysis of cohort studies

Supportive evidence from a well-conducted case-control study

C Supportive evidence from poorly controlled or uncontrolled studies

- Evidence from randomized clinical trials with one or more major or three or more minor methodological flaws that could invalidate the results
- Evidence from observational studies with high potential for bias (such as case series with comparison to historical controls)
- Evidence from case series or case reports

Conflicting evidence with the weight of evidence supporting the recommendation

E Expert consensus or clinical experience

Non-Material Interest Disclosures

Adult Major Depressive Disorder

Summary of Non-Material Interest Disclosures

None of the members of the Adult Major Depressive Disorder Work Group had any disqualifying material interests under the PCPI Conflict of Interest Policy. The following is a summary of non-disqualifying interests disclosed on Work Group members' Material Interest Disclosure Statements (not including information concerning family member interests). Completed Material Interest Disclosure Statements are available upon request.

<u>Work Group Member</u>	<u>Disclosures</u>
Alan A. Axelson, MD	Sole Ownership of InterCare Psychiatric Services – Group Practice and Strategic Consulting Receipt of Speaking Honoraria: Eli Lilly (for ADHD in 2009)
Thomas J. Craig, MD, MPH, DLFAPA, FACPM	Consultant to the APA (for a project related to PTSD in 2009) Service on a Quality Committee: APA Service on Editorial Review: Journal of Technology in Human Services
Molly Finnerty, MD	Employed by the New York State Office of Mental Health - Direct the Bureau of Evidence Based Services and Implementation Science Service on a Quality Committee: APA
Jerry Halverson, MD	Research/Grant Support: Site PI for GSK, Cyberonics and Northstar Studies for University of WI (unpaid position)
John S. McIntyre, MD (Co-Chair)	Director of NAMI-Rochester Service on a Quality Committee: APA
Clifford K. Moy, MD	Service on a Quality Committee: Texas Medical Healthcare Partnership
Mark A. Reinecke, PhD	Research/Grant Support: Harty Foundation, SOFTADS NIDA (TADS project) Employed by the Feinberg School of Medicine as Chief Psychologist Receipt of Speaking Honoraria for academic lectures on the treatment of depression Royalties: mostly academic books Service on Editorial Board: The International Journal of Cognitive Psychotherapy
Leslie H. Secrest, MD	Service on a Quality Committee: Hospital
Carl A. Sirio, MD	Service on a Quality Committee: Hospital, The Joint Commission

References:

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**American Medical Association (AMA)-convened
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APPENDIX A
**Adult Major Depressive Disorder Performance Measurement
Specifications**

Coding Reviewed and Updated: September, 2015

Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI®). These Measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.

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Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The AMA, the PCPI and its members disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications. Use of CPT coding beyond fair use requires a license from the AMA.

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Adult Major Depressive Disorder

Measure #2: Suicide Risk Assessment

A. Specifications for Administrative Data Sources

Denominator (Eligible Population)	<p>All patients aged 18 years and older with a diagnosis of major depressive disorder (MDD)</p> <p>Age >= 18 years</p> <p>AND</p> <p>Diagnosis for Major Depressive Disorder (ICD-9-CM) [reportable through 9/30/2015]: 296.20, 296.21, 296.22, 296.23, 296.24, 296.30, 296.31, 296.32, 296.33, 296.34</p> <p>Diagnosis for Major Depressive Disorder (ICD-10-CM) [reportable beginning 10/1/2015]: F32.0, F32.1, F32.2, F32.3, F32.9, F33.0, F33.1, F33.2, F33.3, F33.9</p> <p>AND</p> <p>CPT® Code for Encounter: 90791, 90792, 90832, 90834, 90837, 90845, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99281, 99282, 99283, 99284, 99285</p>
Denominator Exclusions	<p>None</p>
Numerator	<p>Patients with a suicide risk assessment* completed during the visit in which a new diagnosis or recurrent episode was identified</p> <p>* Suicide risk assessment must include questions about the following:</p> <ol style="list-style-type: none"> 1) Suicidal ideation 2) Patient's intent of initiating a suicide attempt <p>AND, if either is present,</p> <ol style="list-style-type: none"> 3) Patient plans for a suicide attempt 4) Whether the patient has means for completing suicide <p>Report G Code: G8932: Suicide risk assessed at the initial evaluation</p>
Denominator Exceptions	<p>None</p>

B. Specifications for Electronic Clinical Data Sources

As of the date of the posting of this document, this measure is currently in use in CMS' EHR Incentive Program (Meaningful Use). The specifications are updated on a regular basis and published on the CMS website. To download the electronic specifications for this measure, visit CMS' eQIM Library and view the most recent publishing:

http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eQIM_Library.html

Additional resources for eQIM implementation can also be found at the eQI Resource Center webpage: <https://ecqi.healthit.gov/>

Accompanying value sets are available in the Value Set Authority Center (VSAC) found at the following webpage: <https://vsac.nlm.nih.gov/>