



## Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to subcriterion 1b).

### Brief Measure Information

**NQF #: 1884**

**De.2. Measure Title:** Depression Response at Six Months- Progress Towards Remission

**Co.1.1. Measure Steward:** MN Community Measurement

**De.3. Brief Description of Measure:** Adult patients age 18 and older with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrate a response to treatment at six months defined as a PHQ-9 score that is reduced by 50% or greater from the initial PHQ-9 score. This measure applies to both patients with newly diagnosed and existing depression identified during the defined measurement period whose current PHQ-9 score indicates a need for treatment. This measure additionally promotes ongoing contact between the patient and provider as patients who do not have a follow-up PHQ-9 score at six months (+/- 30 days) are also included in the denominator.

**1b.1. Developer Rationale:** • Improve the outcomes of symptom control and functioning for patients with major depression and dysthymia. Major depression is a treatable cause of pain, suffering, disability and death, yet primary care providers detect major depression in only 1/3 to 1/2 of their patients with major depression (Schonfeld, 1997 [Low Quality Evidence] Williams Jr, 2002 [Low Quality Evidence])

- Improve the frequency of assessment of the response to treatment
- Improve the communication between the primary care and behavioral health providers, have a common tool to document response.
- Use of a standardized tool (PHQ-9) to measure outcomes over time

Source: ICSI Guideline for Major Depression in Adults in Primary Care 15th edition May 2012

[http://www.icsi.org/depression\\_5/depression\\_\\_major\\_\\_in\\_adults\\_in\\_primary\\_care\\_3.html](http://www.icsi.org/depression_5/depression__major__in_adults_in_primary_care_3.html)

**S.4. Numerator Statement:** Adults age 18 and older with a diagnosis of major depression or dysthymia and an initial PHQ-9 score greater than nine who achieve a response at six months as demonstrated by a six month (+/- 30 days) PHQ-9 score that is reduced by 50% or greater from the initial PHQ-9 score.

**S.7. Denominator Statement:** Adults age 18 and older with a diagnosis of major depression or dysthymia and an initial PHQ-9 score greater than nine.

**S.10. Denominator Exclusions:** Patients who die, are a permanent resident of a nursing home or are enrolled in hospice or palliative care services are excluded from this measure. Additionally, patients who have a diagnosis (in any position) of bipolar or personality disorder are excluded.

**De.1. Measure Type:** PRO

**S.23. Data Source:** Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records

**S.26. Level of Analysis:** Clinician : Group/Practice, Facility

**IF Endorsement Maintenance – Original Endorsement Date:** Mar 04, 2014 **Most Recent Endorsement Date:** Mar 04, 2014

**IF this measure is included in a composite, NQF Composite#/title:**

**IF this measure is paired/grouped, NQF#/title:**

**De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?**

### 1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. **Measures must be judged to meet all subcriteria to pass this criterion and be evaluated against the remaining criteria.**

**1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form**

[1884\\_Evidence\\_MSF5.0\\_Data.doc](#)

**1b. Performance Gap**

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- disparities in care across population groups.

**1b.1. Briefly explain the rationale for this measure (e.g., the benefits or improvements in quality envisioned by use of this measure)**

- Improve the outcomes of symptom control and functioning for patients with major depression and dysthymia. Major depression is a treatable cause of pain, suffering, disability and death, yet primary care providers detect major depression in only 1/3 to 1/2 of their patients with major depression (Schonfeld, 1997 [Low Quality Evidence] Williams Jr, 2002 [Low Quality Evidence])
- Improve the frequency of assessment of the response to treatment
- Improve the communication between the primary care and behavioral health providers, have a common tool to document response.
- Use of a standardized tool (PHQ-9) to measure outcomes over time

Source: ICSI Guideline for Major Depression in Adults in Primary Care 15th edition May 2012

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**1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. (This is required for endorsement maintenance. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included). This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.**

Data collection and submission started in September 2008; a related measure “Depression Remission in Six Months” (NQF # 0711) was selected for public reporting. Remission, the absence of depression symptoms defined as a PHQ-9 < 5, is considered the gold standard in terms of desired outcome for patients with major depression or dysthymia. Initially, the Depression Response in Six Months measure was captured, provided to groups for quality improvement purposes, but not publicly reported. We received feedback providers in the community to begin to also publicly report the response rate (PHQ-9 rate is reduced by 50% or greater) in addition to remission. There continues to be a large gap in care for patients in terms of achieving both remission and response at six months and opportunity for improvement in follow-up and treatment with a step-wise approach.

Response rate data was first publicly reported in May of 2011.

For 431 clinics and 51,057 patients meeting eligibility criteria between 7/1/2009 and 6/30/2010, 9.2% of patients had a response to treatment as defined by a six month PHQ-9 score reduced from the initial PHQ-9 score by 50% or greater. Distribution of response rates:

Range of clinic performance is 0% to 40.2%

Rate Range	% of Clinics
0%	5%
0.5 to 4.9%	29%
5 to 9.9%	34%
10 to 14.9%	23%
15 to 19.9%	7%
20% or greater	2%

This low rate is partially impacted by only 22.7% of patients having a six month (+/-30 days) PHQ-9 to measure remission; the denominator includes patients who did not have a six month PHQ-9 score.

Distribution of obtaining follow-up six month PHQ-9

Range of clinic performance is 0% to 55.8%

Rate Range	% of Clinics
0%	1%
0.5 to 4.9%	14%

5 to 9.9%	24%
10 to 14.9%	22%
15 to 19.9%	15%
20 to 29.9%	16%
30 to 39.9%	5%
40% or greater	3%

MN Community Measurement calculates the statewide rates for the entire population, but only reports those clinics with a denominator > 30. 2010 represents the first year that all clinics were required to report and some clinics had just implemented the PHQ-9 thus limiting the either the number of denominator patients or those who had enough history to report a six month measure.

The analysis below represents 258 clinics that had sufficient history submitted to calculate a six month response rate and a denominator of at least 30 patients.

31 of the 258 clinics included in the data set of patients with an index contact date between 7/1/2009 and 6/30/2010 had confidence intervals fully above the mean, demonstrating meaningful difference and variability within the data.

Average = 9.2%

Range = 0.0% to 40.2%

95% confidence interval 9.0% to 9.5%

StDev = 5.5

Please note: In the intervening time since this analysis was completed, we have received an additional cycle of data. The six month response rate for dates of service 7/1/2010 to 6/30/2011 is now at 10.2% with a range of 0.0% to 50.0%.

**1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.**

Publicly reported data with clinic level rates is available on the MN HealthScores website [www.mnhealthscores.org](http://www.mnhealthscores.org). Additionally, for more detailed information including highlights of top performers, breakdown by clinic site with confidence intervals please refer to our Health Care Quality Report posted on our corporate website at: [http://mncm.org/site/upload/files/Book\\_6\\_21\\_2012.pdf](http://mncm.org/site/upload/files/Book_6_21_2012.pdf)

**1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability. (This is required for endorsement maintenance. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.**

Major depressive disorder is a common disorder, widely distributed in the population, and usually associated with substantial symptom severity and role impairment. While the recent increase in treatment is encouraging, inadequate treatment is a serious concern. Emphasis on screening and expansion of treatment needs to be accompanied by a parallel emphasis on treatment quality. Risk factors for major depression include family or personal history of major depression or substance abuse, recent loss, chronic medical illness, stressful life events that include loss, domestic abuse/ violence, traumatic events and major life changes. Although depression can affect anyone in their lifetime, adults in the age ranges of 49 to 54 have the highest rates of depression. Other major risk factors include being female, being African-American and living in poverty. Women, regardless of nationality, race, ethnicity or socioeconomic level have twice the rate of depression than men.

Depression in the elderly is widespread, often undiagnosed and usually untreated. It is a common misperception that it is a part of normal aging. Losses, social isolation and chronic medical problems that older patients experience can contribute to depression. 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. 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%). The recurrence rate is also extremely high at 40%

**1b.5. If no or limited data on disparities from the measure as specified is reported in 1b4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations.**

ICSI Guideline for Major Depression in Adults in Primary Care 15th edition May 2012

[http://www.icsi.org/depression\\_5/depression\\_\\_major\\_\\_in\\_adults\\_in\\_primary\\_care\\_3.html](http://www.icsi.org/depression_5/depression__major__in_adults_in_primary_care_3.html)

Depression Risk Factors- New York Times Jan 22, 2009

The Epidemiology of Major Depressive Disorder Results from the National Comorbidity Survey Replication (NCS-R) Ronald C. Kessler, et al JAMA. 2003;289:3095-3105.

**1c. High Priority** (previously referred to as High Impact)

The measure addresses:

- a specific national health goal/priority identified by DHHS or the National Priorities Partnership convened by NQF; OR
- a demonstrated high-priority (high-impact) aspect of healthcare (e.g., affects large numbers of patients and/or has a substantial impact for a smaller population; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and severity of patient/societal consequences of poor quality).

**1c.1. Demonstrated high priority aspect of healthcare**

Affects large numbers, Patient/societal consequences of poor quality, Severity of illness

**1c.2. If Other:**

**1c.3. Provide epidemiologic or resource use data that demonstrates the measure addresses a high priority aspect of healthcare.**

**List citations in 1c.4.**

The Centers for Disease Control and Prevention states that nationally 15.7% of people report being told by a health care professional that they had depression at some point in their lifetime. Persons with a current diagnosis of depression and a lifetime diagnosis of depression or anxiety were significantly more likely than persons without these conditions to have cardiovascular disease, diabetes, asthma and obesity and to be a current smoker, to be physically inactive and to drink heavily. According to National Institute of Mental Health (NIMH), 6.7 percent of the U.S. population ages 18 and older (14.8 million people) in any given year have a diagnosis of a major depressive disorder. Major depression is the leading cause of disability in the U.S. for ages 15 - 44. Additionally, dysthymia accounts for an additional 3.3 million Americans. In Minnesota, the rates for current depression are 6 -7.9% and the percent of Minnesotans who have a lifetime diagnosis of depression is between 13 and 15%.

Suicide rates for Minnesotans are 10.4 per 100,000 or 1.3 suicides per day, with the highest rates among the following groups: males (4 times greater than females), ages 30 to 49 years, and non-hispanic whites.

**1c.4. Citations for data demonstrating high priority provided in 1a.3**

Centers for Disease Control and Prevention: Anxiety and Depression Effective Treatments Exist: People with depression and anxiety should seek help as early as possible to reduce health effects and improve quality of life. March 2009. Based on 2006 Behavior Risk Factor Surveillance System [www.cdc.gov/Features/dsBRFSSDepressionAnxiety/](http://www.cdc.gov/Features/dsBRFSSDepressionAnxiety/)

Suicide Prevention Resource Center: Minnesota Suicide Fact Sheet; Suicides 1999 - 2005 [www.sprc.org/](http://www.sprc.org/)

National Institute of Mental Health: The Numbers Count: Mental Disorders in America August 2009

[www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america](http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america)

**1c.5. If a PRO-PM (e.g. HRQoL/functional status, symptom/burden, experience with care, health-related behaviors), provide evidence that the target population values the measured PRO and finds it meaningful. (Describe how and from whom their input was obtained.)**

## 2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **Measures must be judged to meet the subcriteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.**

**2a.1. Specifications** The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

**De.5. Subject/Topic Area** (check all the areas that apply):

Behavioral Health, Behavioral Health : Depression, Mental Health, Mental Health : Depression

**De.6. Cross Cutting Areas** (check all the areas that apply):

Functional Status, Health and Functional Status : Functional Status, Patient and Family Engagement

**S.1. Measure-specific Web Page** (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)

<http://mncm.org/cycle-a-dds-guides/>

**S.2a. If this is an eMeasure**, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

This is not an eMeasure Attachment:

**S.2b. Data Dictionary, Code Table, or Value Sets** (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

Attachment Attachment: A03\_2016\_FINAL\_Depression\_VS.xlsx

**S.3. For endorsement maintenance**, please briefly describe any changes to the measure specifications since last endorsement date and explain the reasons.

**S.4. Numerator Statement** (Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome)

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.

Adults age 18 and older with a diagnosis of major depression or dysthymia and an initial PHQ-9 score greater than nine who achieve a response at six months as demonstrated by a six month (+/- 30 days) PHQ-9 score that is reduced by 50% or greater from the initial PHQ-9 score.

**S.5. Time Period for Data** (What is the time period in which data will be aggregated for the measure, e.g., 12 mo, 3 years, look back to August for flu vaccination? Note if there are different time periods for the numerator and denominator.)

PHQ-9 scores are collected for each patient from the time they meet the inclusion criteria of diagnosis ICD-9 codes and PHQ-9 score greater than nine (this is the index or anchor date) until seven months have elapsed. This allows for calculation of a response rate +/- 30 days from the index date.

**S.6. Numerator Details** (All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.

This PROM-PM outcome measure is of a longitudinal nature, seeking to measure the response of depression symptoms (progress towards remission) within six months for the patient with depression having an instance of elevated PHQ-9.

The numerator is defined as patients with a six month (+/- 30 days) PHQ-9 score that is reduced by 50% or greater from the initial PHQ-9 score.

The numerator rate is calculated as follows:

# adult pts with major depression or dysthymia with a PHQ-9 score that is reduced by 50% or greater from the initial PHQ-9 score at 6 months(+/- 30 days)/

# adult pts with major depression or dysthymia with index contact PHQ-9 > 9

Patients who do not have a six month +/- 30 day PHQ-9 score obtained are included in the denominator for this measure.

**S.7. Denominator Statement** (Brief, narrative description of the target population being measured)

Adults age 18 and older with a diagnosis of major depression or dysthymia and an initial PHQ-9 score greater than nine.

**S.8. Target Population Category** (Check all the populations for which the measure is specified and tested if any):

Populations at Risk

**S.9. Denominator Details** (All information required to identify and calculate the target population/denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

Adults age 18 and older; no upper age limit

Have the diagnosis of major depression or dysthymia defined by ICD-9/ ICD-10 diagnosis codes (see value sets).

AND

PHQ-9 Score is greater than nine.

\* For primary care providers the diagnosis codes can be in any position (primary or secondary). For behavioral health providers the diagnosis codes need to be in the primary position.

Patients who do not have a six month +/- 30 day PHQ-9 score obtained are included in the denominator for this measure.

Value set dictionary of codes for major depression and dysthymia can be obtained at <http://mncm.org/cycle-a-dds-guides/>.

**S.10. Denominator Exclusions** (Brief narrative description of exclusions from the target population)

Patients who die, are a permanent resident of a nursing home or are enrolled in hospice or palliative care services are excluded from this measure. Additionally, patients who have a diagnosis (in any position) of bipolar or personality disorder are excluded.

**S.11. Denominator Exclusion Details** (All information required to identify and calculate exclusions from the denominator such as definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

- Patients who die during the measurement period
- Patients who are a permanent nursing home resident during the measurement period
- Patients who are enrolled in hospice or palliative care services during the measurement period
- Bipolar Disorder (in any position)
- Personality Disorder (in any position).

Value set dictionary of codes for exclusions of bipolar disorder or personality disorder can be obtained at <http://mncm.org/cycle-a-dds-guides/>.

**S.12. Stratification Details/Variables** (All information required to stratify the measure results including the stratification variables, definitions, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b)

This measure is currently not stratified.

**S.13. Risk Adjustment Type** (Select type. Provide specifications for risk stratification in S.12 and for statistical model in S.14-15)

Statistical risk model

If other:

**S.14. Identify the statistical risk model method and variables** (Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development and testing should be addressed with measure testing under Scientific Acceptability)

This measure is risk adjusted based on severity band of the PHQ-9 which is based on the initial PHQ-9 score. Severity bands are defined as 10 to 14- moderate depression, 15 to 19- moderately severe depression and 20 to 27- severe depression. The measures is also risk adjusted for insurance product type (commercial, Medicare, and MN government programs/ self-insured) and age bands (18-25, 26-50, 51-65 and 66+).

**S.15. Detailed risk model specifications** (must be in attached data dictionary/code list Excel or csv file. Also indicate if available at measure-specific URL identified in S.1.)

Note: Risk model details (including coefficients, equations, codes with descriptors, definitions), should be provided on a separate worksheet in the suggested format in the Excel or csv file with data dictionary/code lists at S.2b.

**S.15a. Detailed risk model specifications** (if not provided in excel or csv file at S.2b)

#### Overview of Risk Adjustment:

Not all patients have the same likelihood of achieving optimal health outcomes due to barriers based on demographic, physical or socio-economic situations. Risk Adjustment is the process of adjusting the measure to account for the barriers that are outside the control or influence of the provider.

#### Definitions

Risk Adjustment:

Use of patient level information to explain variation in health outcomes

Segmentation:

Dividing a population into meaningful categories

MNCM will display Risk Adjustment on MNHealthScores.org, Provider portal and other MNMCM publications. Please note it is separate from the SQRMS contract with the Minnesota Department of Health.

MNCM risk adjustment employs an Actual to Expected methodology where the actual measure result remains unaltered, instead a risk adjusted comparison is created based on same proportions of the risk factors that the clinic has.

#### Depression Suite

Remission at 6 months was originally confirmed as part of the original six measures to be risk adjusted. After further consideration, the committee agreed it would be inconsistent to only risk adjust one of the six Depression measures.

#### Depression Measures Suite

PHQ9 Follow Up at 6 months

Response at 6 months

Remission at 6 months

PHQ9 Follow Up at 12 months

Response at 12 months

Remission at 12 months

#### Recommended Variables:

Age Band (18-25, 26-50, 51-65, 66-75)

Insurance Product

Initial Depression Severity Level

Schedule Q3 2015

The measures are in sequence for each time period; the patient must have the follow up to be eligible for the Response measure, the patient must meet the Response requirement (50% improvement) to be eligible for the Remission measure.

After analyzing the entire Depression Suite, listed below, it was reconfirmed that Age, Product and Severity Levels are important and significant factors in the outcome, are present at the initial patient encounter, are beyond the control of the provider and all variables are already being collected so no additional provider burden is required. These are the MARC and Board approved care requirements for risk adjustment.

#### Methodology:

The methodology for risk adjustment is using an Actual to Expected process where the clinic/medical group's rate is not changed but instead, the risk variables are used to calculate a unique expected value for each clinic/medical group. The rates does not change, the comparison does.

With Actual to Expected, since the expected is not a stable variable for all clinics, it is not valid to compare the clinic's confidence interval to the expected value. Instead to test whether or not there was a statistically significant difference between the expected value and the actual value achieved by the clinic, a one population proportions test was used. This method is employed to test the proportion of optimally managed patients attributed to a clinic compared to a specified value for that clinic. In the MNMCM case the specified value is an expected rate calculated taking into account the overall state rate and adjusted for risk factors specific to the measure.

#### Variables Tested:

- Insurance Product (4): Commercial, Medicare, Minnesota Health Care Plans (MHCP) and Cash or Uninsured patients
- Age Bands (4): 18-25, 26-50, 51-65, 66-75. The patient age is determined at the end of the measure.
- Level of severity based on initial PHQ9 (3): Moderate (PHQ9 below 15), Moderately Severe (PHQ9 15 to 19), Severe (PHQ9 over 19)

6 month Response

Cash / Uninsured



AgeCat	Level of Severity	Commercial	Medicare	MHCP	Total			
18-25	Moderate	11.6%	14.2%	7.2%	6.8%	10.1%		
18-25	Moderately severe	12.5%	12.8%	9.3%	8.9%	11.3%		
18-25	Severe	14.2%	16.4%	9.2%	6.6%	11.7%		
26-50	Moderate	14.1%	9.5%	7.8%	8.9%	11.8%		
26-50	Moderately severe	15.7%	8.6%	8.1%	9.6%	12.3%		
26-50	Severe	16.8%	9.7%	7.3%	8.3%	11.6%		
51-65	Moderate	14.6%	11.7%	10.9%	10.9%	13.1%		
51-65	Moderately severe	16.2%	13.1%	9.7%	12.3%	13.9%		
51-65	Severe	17.8%	11.0%	7.7%	10.1%	13.0%		
Over 65	Moderate	14.4%	15.5%	12.9%	19.0%	15.4%		
Over 65	Moderately severe	12.1%	17.6%	12.8%	19.1%	16.9%		
Over 65	Severe	23.6%	18.9%	15.6%	20.0%	19.0%		
	Total	16.1%	13.6%	9.0%	10.1%	13.4%		
18-25		12.4%	14.1%	8.5%	7.5%	10.9%		
26-50		15.1%	9.2%	7.8%	9.0%	11.9%		
51-65		15.7%	12.0%	9.6%	11.2%	13.3%		
Over 65		15.2%	16.6%	13.2%	19.2%	16.3%		
	Moderate	13.8%	13.3%	8.5%	9.3%	12.3%		
	Moderately severe	15.1%	13.9%	8.8%	10.2%	12.9%		
	Severe	16.5%	13.3%	7.8%	8.5%	12.4%		
Product adjusted for Age and Severity				15.1%	11.5%	9.4%	10.1%	13.4%
Tests of significance at 99%								
Commercial and Medicare are significantly different from MHCP and Uninsured								
All four age ranges are significant from each other								
Severity is not significant								
This measure shows the advantage of using multiple variables for risk adjustment, while Medicare as a whole dropped below the commercial rate, that is due to the under 65 Medicare, usually disabled, patients. The over 65 Medicare patients continue to behave similarly to the commercial patients. If we do not use both age and product, the risk calculation would be problematic.								
Summary of Variables Significance Testing (T test at 99.9%)								
6 Month Depression Measure Suite								
	Follow Up	Response	Remission					
Product - Compared to Commercial								
Medicare	>.999	.999	>.999					
MHCP	>.999	>.999	>.999					
Uninsured	>.999	>.999	>.999					
Age - Compared to 51-65								
18-25	>.999	>.999	>.999					
26-50	>.999	>.999	>.999					
Over 65	.998	>.999	>.999					
Severity- Compared to Moderate								
Moderately Severe		.423	.998	>.999				
Severe		.933	.459	>.999				
S.16. Type of score:								



**Rate/proportion**

If other:

**S.17. Interpretation of Score** (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)

Better quality = Higher score

**S.18. Calculation Algorithm/Measure Logic** (Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.)

This measure is calculated by submitting a visit level file for the eligible patients, each record in the file represents a contact with the patient and PHQ-9 score associated with this contact. Data file is submitted to a HIPAA secure data portal. Programming within the data portal determines the starting point (index visit) and then calculates based on dates if a six month +/- 30 days PHQ-9 was obtained and the resulting score.

Calculation logic:

Is patient eligible for inclusion with diagnosis codes (value set list) and PHQ-9 > 9?

If yes, mark the visit as index (anchor) and include this patient in the denominator.

Does patient have a PHQ-9 score completed with a contact date that is six months +/- 30 days from the index date?

If yes, include this score to calculate rate. Programming logic includes the most recent score within the +/- 30 day window.

If no, patient is included in the denominator only. Not having a PHQ-9 score within the +/- 30 day window is considered a numerator miss.

If the patient does have a six month +/- 30 day PHQ-9 score, is it reduced from the initial PHQ-9 score by 50% or greater?

If yes; patient is considered a numerator case for rate calculation.

**S.19. Calculation Algorithm/Measure Logic Diagram URL or Attachment** (You also may provide a diagram of the Calculation Algorithm/Measure Logic described above at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1) Attachment

**S.20. Sampling** (If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)

IF a PRO-PM, identify whether (and how) proxy responses are allowed.

The measure and its denominator are not based on a sample. The measure was developed with the intent for full population reporting the EMR as the data source. Not amenable to sampling because 1) each patient's starting point for measurement is different, depending on the date of elevated PHQ-9 and 2) the longitudinal nature of the measure tracking improvement over time.

**S.21. Survey/Patient-reported data** (If measure is based on a survey, provide instructions for conducting the survey and guidance on minimum response rate.)

IF a PRO-PM, specify calculation of response rates to be reported with performance measure results.

**S.22. Missing data** (specify how missing data are handled, e.g., imputation, delete case.)

Required for Composites and PRO-PMs.

**S.23. Data Source** (Check ONLY the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.24.

Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Paper Medical Records

**S.24. Data Source or Collection Instrument** (Identify the specific data source/data collection instrument e.g. name of database, clinical registry, collection instrument, etc.)

IF a PRO-PM, identify the specific PROM(s); and standard methods, modes, and languages of administration.

The data source is the medical group's/ clinic's medical record information, most frequently from an EMR. A CSV file is created by each medical group and uploaded to a password protected, HIPAA secure data portal which performs rate calculation. Selected Patient Reported Data, not because it is necessarily a separate data source, but because this measure is based on a patient reported outcome tool, a PRO-PM measure. Frequently this PRO tool, the PHQ-9, is housed within a clinic's EMR, or in paper charts is a part

of the patient's medical record.

**S.25. Data Source or Collection Instrument** (available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)

Attachment

**S.26. Level of Analysis** (Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)

Clinician : Group/Practice, Facility

**S.27. Care Setting** (Check ONLY the settings for which the measure is SPECIFIED AND TESTED)

Ambulatory Care : Clinician Office/Clinic, Behavioral Health/Psychiatric : Outpatient

If other:

**S.28. COMPOSITE Performance Measure** - Additional Specifications (Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)

**2a. Reliability** – See attached Measure Testing Submission Form

**2b. Validity** – See attached Measure Testing Submission Form

1884\_MeasureTesting\_MS5.0\_Data.doc

### 3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

#### 3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

##### 3a.1. Data Elements Generated as Byproduct of Care Processes.

generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition, Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims)

If other:

#### 3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

**3b.1. To what extent are the specified data elements available electronically in defined fields?** (i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields)

ALL data elements are in defined fields in electronic health records (EHRs)

**3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources.**

**3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL.**

Attachment:

#### 3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

**3c.1. Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.**

**IF a PRO-PM, consider implications for both individuals providing PROM data (patients, service recipients, respondents) and those whose performance is being measured.**

Over the last three years during the direct data submission process for three measures (Optimal Diabetes Care, Optimal Vascular Care and Depression Measures) we have learned the following:

1. Data Submission- Providing data collection software for medical groups wishing to submit data was not always the best and most efficient way of collecting data. As electronic health records use becomes more pervasive in our state, providing templates of data file submissions proved to be more efficient.
2. Specifications- Detailed specifications with instructions on how to handle most situations (e.g. detailed instructions on blood pressure values) has been valuable to medical groups, increased data accuracy and resulted in 98% of groups submitting data successfully.
3. Audit- Audit methods have insured the accuracy of our data and we are able to successfully compare providers because everyone is pulling their data the same way and subject to the same rules.
4. Confidentiality- Patient confidentiality has been addressed by numerous mechanisms. MNMCM only receives the patient level information needed to calculate the rates, determine eligibility for inclusion in the measure and support the administration of pay for performance programs. The PHI submitted is minimal and the data is protected by 1) password protection with password only available to the medical group submitting data, 2) file upload process is encrypted as data is transferred and 3) Data is stored on a separate secure server and meets all HIPAA protection rules.
6. Acceptance of Data- Vast improvement in terms of the timeliness of the data submitted by medical groups six weeks after the end of the measurement period as compared to prior method of health plan's samples and the results over a year old. Providers are more accepting of the results as compared to previous methods of pooling health plan samples.
7. Data Collection Burden- We have learned that for additional future measures we will need to stagger the data collection time frames and submission deadlines as to not burden the medical groups in terms of abstraction/ extraction (e.g. can't always have a measurement period Jan 1st to Dec 31st reported the second week of February, may need to consider July 1st to June 30th with data submission in August)
8. Health Plans: pay for performance and the inclusion of measures within contracts significantly impacts the number of groups participating in each measure.

**3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).**

## 4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

### 4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

#### 4.1. Current and Planned Use

*NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.*

Planned	Current Use (for current use provide URL)
Public Reporting	
Payment Program	
Quality Improvement with Benchmarking	

(external benchmarking to multiple organizations)

Quality Improvement (Internal to the specific organization)

**4a.1. For each CURRENT use, checked above, provide:**

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included

**4a.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons?** (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)

**4a.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement.** (Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.)

**4b. Improvement**

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

**4b.1. Progress on Improvement. (Not required for initial endorsement unless available.)**

Performance results on this measure (current and over time) should be provided in 1b.2 and 1b.4. Discuss:

- Progress (trends in performance results, number and percentage of people receiving high-quality healthcare)
- Geographic area and number and percentage of accountable entities and patients included

**4b.2. If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.**

**4c. Unintended Consequences**

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

**4c.1. Were any unintended negative consequences to individuals or populations identified during testing; OR has evidence of unintended negative consequences to individuals or populations been reported since implementation? If so, identify the negative unintended consequences and describe how benefits outweigh them or actions taken to mitigate them.**

**5. Comparison to Related or Competing Measures**

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

## 5. Relation to Other NQF-endorsed Measures

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.

Yes

### 5.1a. List of related or competing measures (selected from NQF-endorsed measures)

0103 : Adult Major Depressive Disorder (MDD): Comprehensive Depression Evaluation: Diagnosis and Severity

0104 : Adult Major Depressive Disorder (MDD): Suicide Risk Assessment

0710 : Depression Remission at Twelve Months

0711 : Depression Remission at Six Months

0712 : Depression Utilization of the PHQ-9 Tool

1885 : Depression Response at Twelve Months- Progress Towards Remission

### 5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.

## 5a. Harmonization

The measure specifications are harmonized with related measures;

OR

The differences in specifications are justified

### 5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):

Are the measure specifications completely harmonized?

Yes

### 5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.

## 5b. Competing Measures

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

OR

Multiple measures are justified.

### 5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):

Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)

No competing measures. This measure is closely related to MNMCM's Depression Remission at Six Months (NQF# 0711) defined as a PHQ-9 < 5 at six months. The depression response measure proposed is the same target population with an intermediate goal of achieving response (initial PHQ-9 is reduced by 50% or greater)

## Appendix

**A.1 Supplemental materials may be provided in an appendix.** All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

**Attachment:**

## Contact Information

**Co.1 Measure Steward (Intellectual Property Owner):** MN Community Measurement

**Co.2 Point of Contact:** Anne, Snowden, [snowden@mncm.org](mailto:snowden@mncm.org), 612-454-4811-

**Co.3 Measure Developer if different from Measure Steward:** MN Community Measurement

<b>Co.4 Point of Contact:</b> Anne, Snowden, <a href="mailto:snowden@mncm.org">snowden@mncm.org</a> , 612-454-4811-
<b>Additional Information</b>
<b>Ad.1 Workgroup/Expert Panel involved in measure development</b> <b>Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.</b> <a href="#">Nancy Jaeckels - Institute for Clinical Systems Improvement, Vice President Member Relations &amp; Strategic Initiatives</a> <a href="#">Katrina Beckstrom - HealthPartners - Care Innovation &amp; Measurement, Senior Quality Coordinator</a> <a href="#">Michael Trangle, MD - HealthPartners Clinics/ Regions Hospital, Associate Medical Director</a> <a href="#">Kenneth Joslyn, MD - Medica Health Plan, Medical Director Quality and Population Health</a> <a href="#">Jim Chase - MN Community Measurement, President</a> <a href="#">Diane Mayberry - MN Community Measurement, Chief Operating Officer</a> <a href="#">Anne Snowden - MN Community Measurement, Director of Performance Measurement &amp; Reporting</a> <a href="#">Carrie Trygstad- MN Community Measurement, Project Manager</a>  <a href="#">This group worked in concert with the ICSI DIAMOND project for measure development; the original charter of the workgroup includes:</a> <a href="#">Develop population-wide, ambulatory care measures(s) of the quality of care for patients diagnosed with Depression, consistent with the work of the ICSI DIAMOND project.</a> <ul style="list-style-type: none"><li>• <a href="#">Process measures (ie: quality of coding, depression screening, completion of PHQ-9 survey, 3 month follow-up visit)</a></li><li>• <a href="#">Outcome measures (response and remission rates)</a><ul style="list-style-type: none"><li>o <a href="#">Develop direct data collection, submission and reporting plan</a></li></ul></li><li>• <a href="#">Physicians and non-physicians</a></li><li>• <a href="#">Primary care and Behavioral Health Care</a></li></ul>
<b>Measure Developer/Steward Updates and Ongoing Maintenance</b> <b>Ad.2 Year the measure was first released:</b> <a href="#">2011</a> <b>Ad.3 Month and Year of most recent revision:</b> <a href="#">12, 2012</a> <b>Ad.4 What is your frequency for review/update of this measure?</b> <a href="#">Annual</a> <b>Ad.5 When is the next scheduled review/update for this measure?</b> <a href="#">12, 2013</a>
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