



DEPRESSION CARE IN MINNESOTA: ADULTS & ADOLESCENTS

2020 REPORT YEAR (2019 DATES OF SERVICE)

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DEPRESSION OUTCOMES IN MINNESOTA: ADULTS & ADOLESCENTS

2020 report year (2019 dates of service)

WHO IS MN COMMUNITY MEASUREMENT?

As an independent nonprofit dedicated to empowering health care decision makers with meaningful data, MN Community Measurement (MNCM) is a statewide resource for timely, comparable information on health care costs and quality. While Minnesota has some of the best health indicators in the country, there continues to be wide variation in health care quality. Quality measurement in health care delivers value to patients, providers, payers and purchasers and the community. This report summarizes MNCM's measures related to depression care, using data collected in 2020 for care provided in 2019. The measures were developed or chosen for public reporting to address gaps in quality and to focus community efforts on improvement.

PURPOSE OF THIS REPORT

This report provides a summary view of the depression screening and outcome measures for both adults and adolescents, which are collected and reported by MNCM. Additional data is in the detailed tables included in the [Appendix](#) to this report.

NOTES

- This is the first year that the adolescent depression outcome measures have been reported.
- Several significant technical changes were made to the depression measure suite, which are summarized [here](#). Because of these changes, the results are not comparable to previous years.
- The appendix to this report includes results for individual medical groups and clinic locations. These data will be included in a re-launch of the MNHealthScores public reporting site in late 2020.

ACKNOWLEDGEMENTS

This report is possible because of the engagement of several stakeholders who are committed to continuous improvement and recognize the important role measurement plays in helping our community establish priorities and improve together.

MNCM extends our thanks to all medical groups and payers for contributing the data necessary for measurement, to the State of Minnesota for its support through the Statewide Quality Reporting and Measurement System, and to the many members of MNCM committees and workgroups providing ongoing guidance to shape this important work.

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REPORT HIGHLIGHTS

SCREENING MEASURES

- Use of mental health and depression screening tools is generally high, but there is significant variation across medical groups.
- For the **Adolescent Mental Health and/or Depression Screening** measure, there were eight medical groups who screened **100 percent** of their eligible population in 2019.

OUTCOME MEASURES

- **Follow-up after diagnosis of depression** continues to show substantial room for improvement in both the adult and adolescent populations.
 - **51.5 percent of adults and 56.6 percent of adolescents** were not re-assessed after six months of treatment.
- **Response and remission** rates also show substantial room for improvement in both the adult and adolescent populations.
 - **19.4 percent of adults and 15.5 percent of adolescents** showed at least a 50 percent reduction from their initial PHQ-9/PHQ-9M score (response) six months after diagnosis.
 - While overall response and remission rates are low, there were **14 medical groups** that had rates significantly above average on at least 50 percent of measures for which they were eligible.

QUALITY MEASURE		2020 RY Statewide Average (2019 Dates of Service)	Total Eligible Patients (Denominator)
SCREENING MEASURES	Adolescent Mental Health and/or Depression Screening	88.7%	166,311
	Adolescent Depression: PHQ-9/PHQ-9M Utilization	78.4%	19,574
	Adult Depression: PHQ-9/PHQ-9M Utilization	77.7%	248,162
SIX MONTH MEASURES	ADULTS		
	Adult Depression: Six Month Follow-up	48.5%	120,344
	Adult Depression: Response at Six Months	19.4%	120,344
	Adult Depression: Remission at Six Months	11.3%	120,344
	ADOLESCENTS		
	Adolescent Depression: Six Month Follow-up	43.4%	11,658
	Adolescent Depression: Response at Six Months	15.5%	11,658
	Adolescent Depression: Remission at Six Months	8.0%	11,658
12 MONTH MEASURES	ADULTS		
	Adult Depression: 12 Month Follow-up	41.8%	120,344
	Adult Depression: Response at 12 Months	17.0%	120,344
	Adult Depression: Remission at 12 Months	10.1%	120,344
	ADOLESCENTS		
	Adolescent Depression: 12 Month Follow-up	38.9%	11,658
	Adolescent Depression: Response at 12 Months	14.5%	11,658
	Adolescent Depression: Remission at 12 Months	7.8%	11,658

SUMMARY OF STATEWIDE RESULTS

This table provides an overview of the statewide rates for the mental health measures.

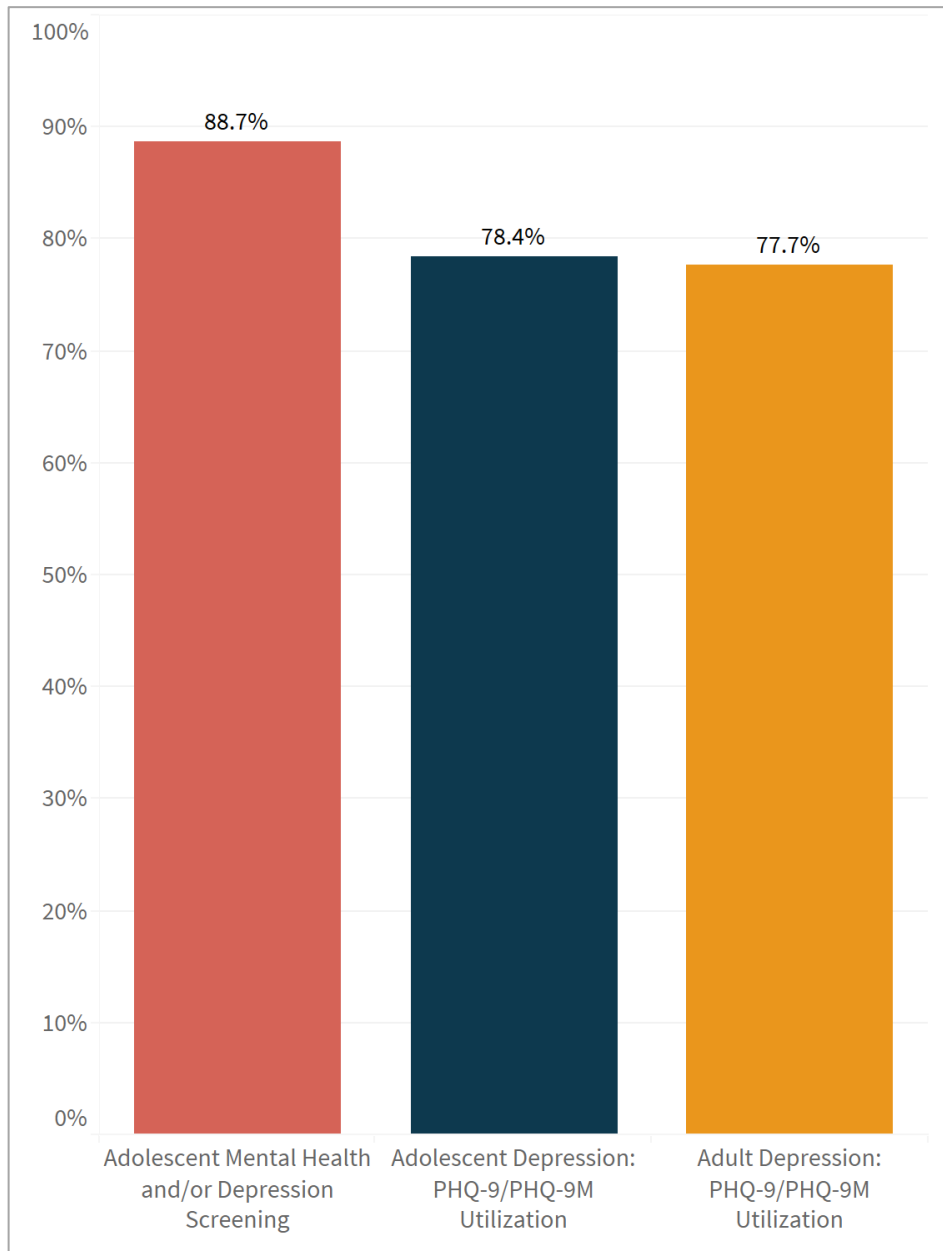
While screening for mental health/depression continue to increase, outcomes among patients with depression (i.e., response and remission) continues to show room for improvement for both adults and adolescents.

Statewide average: The average performance rate among medical groups for the 2020 report year.

SCREENING MEASURES

Statewide results

2020 report year (2019 dates of service)



AT A GLANCE

The **Adolescent Mental Health and/or Depression Screening** measure captures adolescents without a diagnosis of depression who were screened for mental health and/or depression.

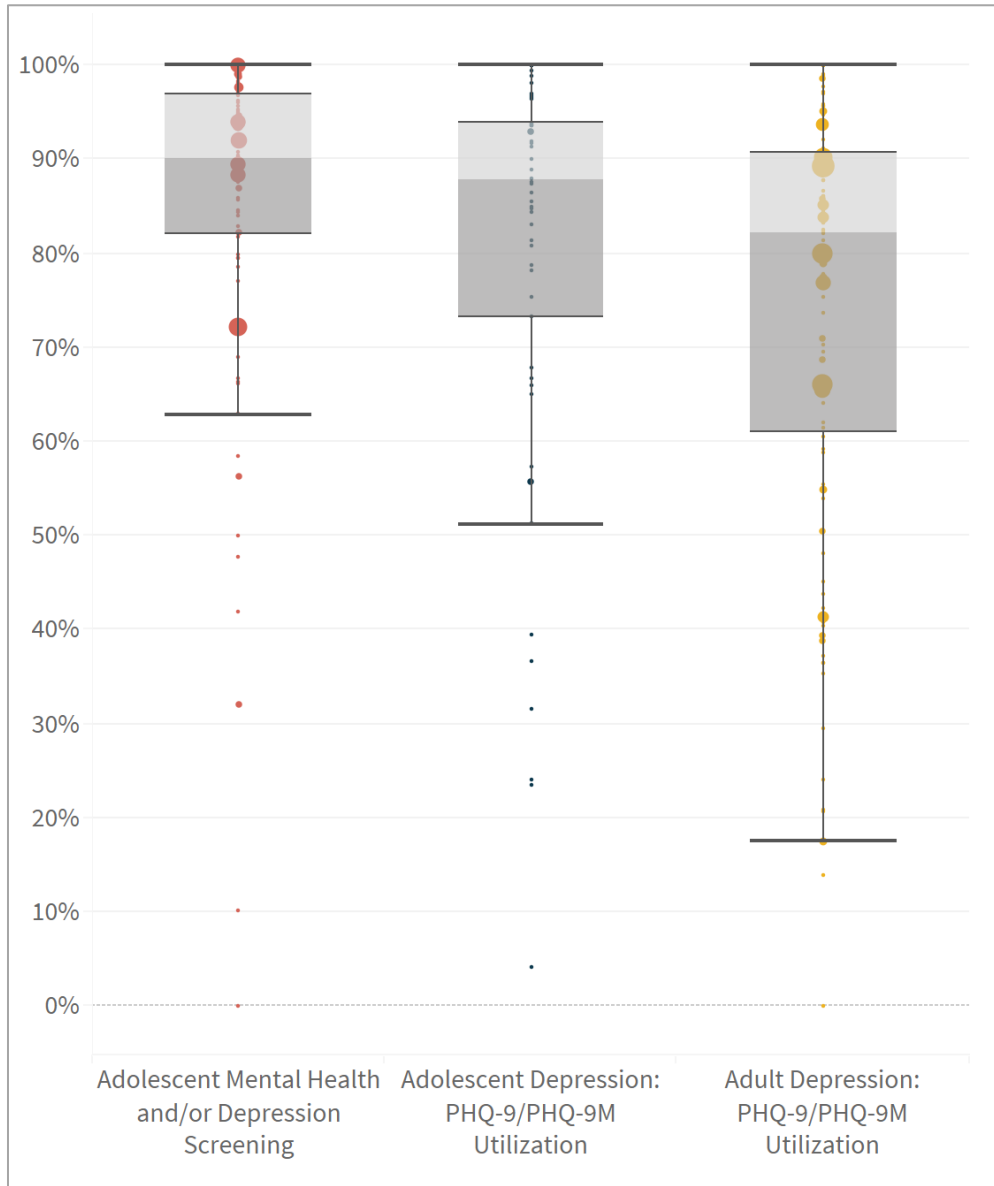
In contrast, the **PHQ-9/PHQ-9M Utilization** measures (adolescents & adults) only include patients *diagnosed with depression* who were assessed for depression using a PHQ-9/PHQ-9M tool.

The 2020 report year is the first year that the **PHQ-9/PHQ-9M Utilization** measure has been reported for **adolescents** (ages 12 – 17).

SCREENING MEASURES

Variation by medical group*

2020 report year (2019 dates of service)



*Medical groups with at least 30 patients in denominator

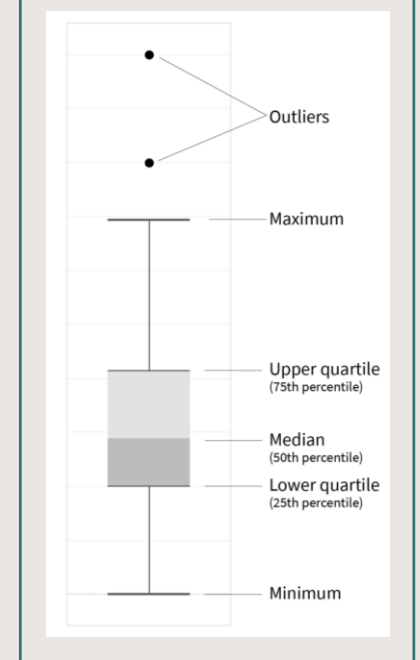
AT A GLANCE

All three screening measures have significant variation among medical groups.

The **Adult Depression: PHQ-9/PHQ-9M Utilization** measure has the widest variation among medical groups.

The **Adolescent Mental Health and/or Depression Screening** measure has the most consistent performance among medical groups.

How to read a box plot

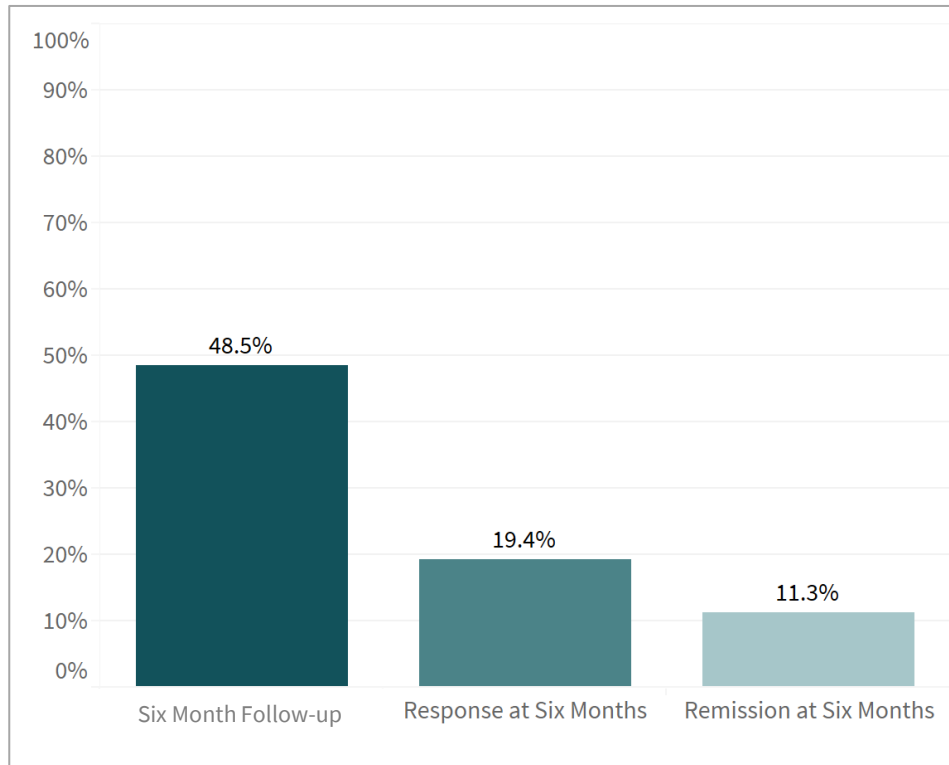


SIX MONTH DEPRESSION MEASURES

Statewide results

2020 report year (2019 dates of service)

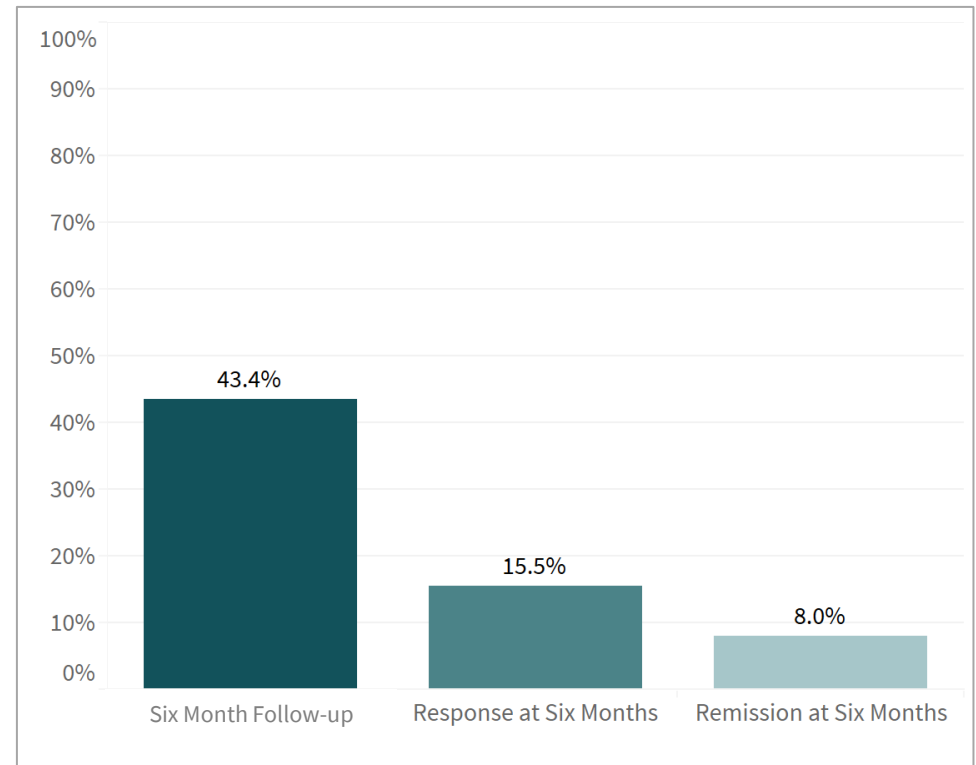
ADULTS



On average, out of every 100 adults with depression:

- Approximately 49 adults are re-assessed with a PHQ-9/PHQ-9M tool after six months (+/- 60 days).
- Approximately 19 adults have a response to treatment.
- Approximately 11 adults are considered in remission.

ADOLESCENTS



On average, out of every 100 adolescents with depression:

- Approximately 43 adolescents are re-assessed with a PHQ-9/PHQ-9M tool after six months (+/- 60 days).
- Approximately 16 adolescents have a response to treatment.
- Approximately eight adolescents are considered in remission.

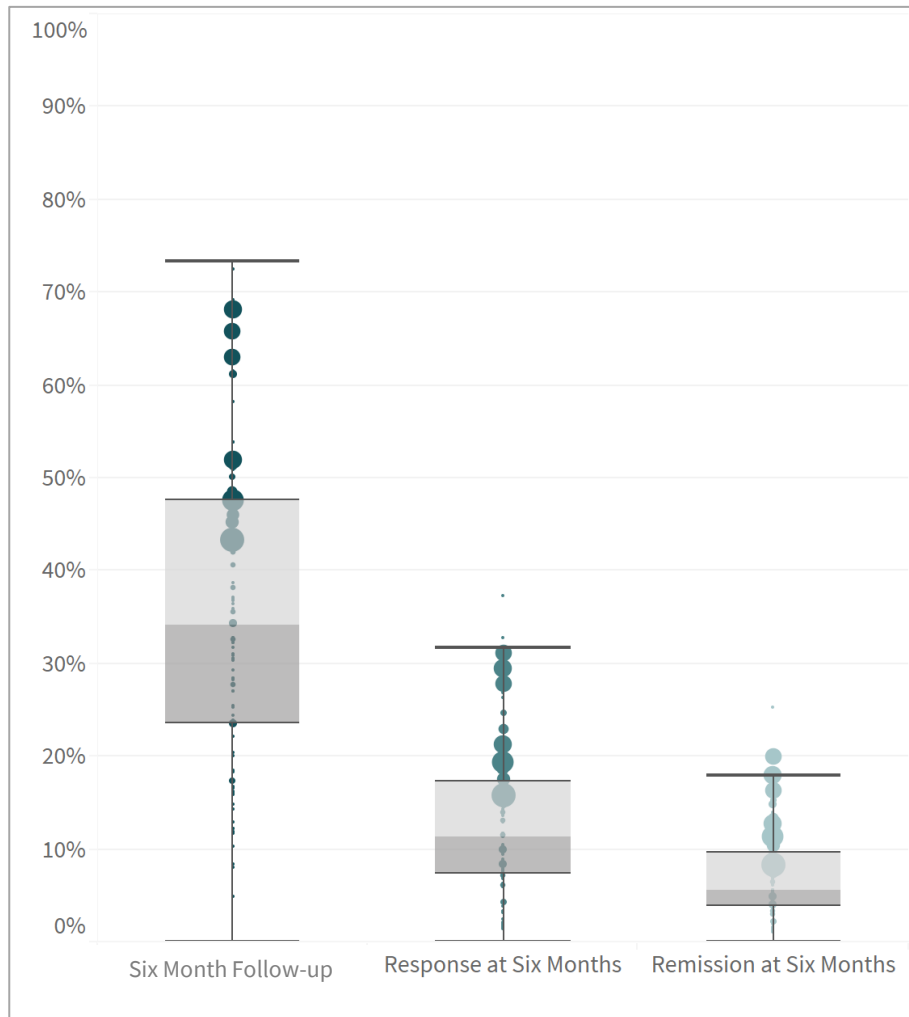
Response is defined as having at least 50% reduction of initial index PHQ-9/PHQ-9M score. **Remission** is defined as having a PHQ-9/PHQ-9M score of less than 5.

SIX MONTH DEPRESSION MEASURES

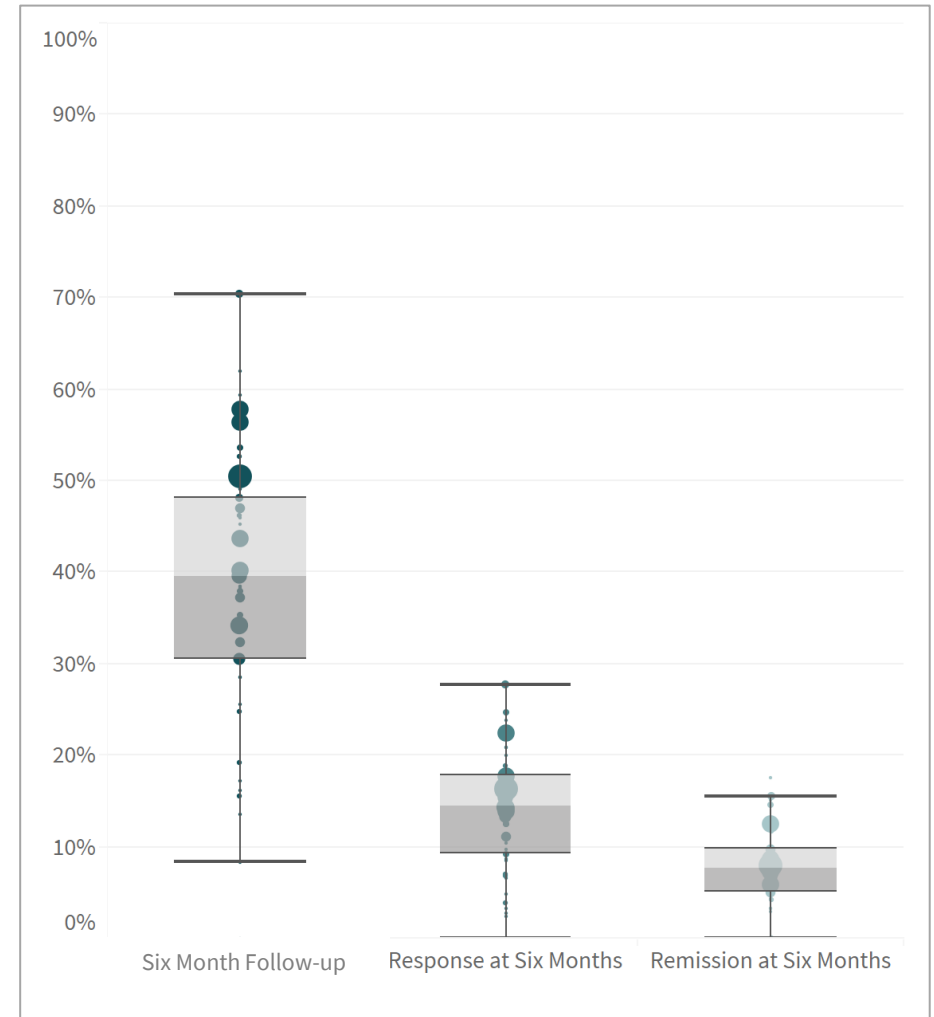
Variation by medical group*

2020 report year (2019 dates of service)

ADULTS



ADOLESCENTS



For both adults and adolescents, the **Six Month Follow-up** measure has the widest variation among medical groups, while performance for the **Remission at Six Months** measure is the most consistent. For both adults and adolescents, the highest performing medical groups achieved results well above the statewide average.

*Medical groups with at least 30 patients in denominator

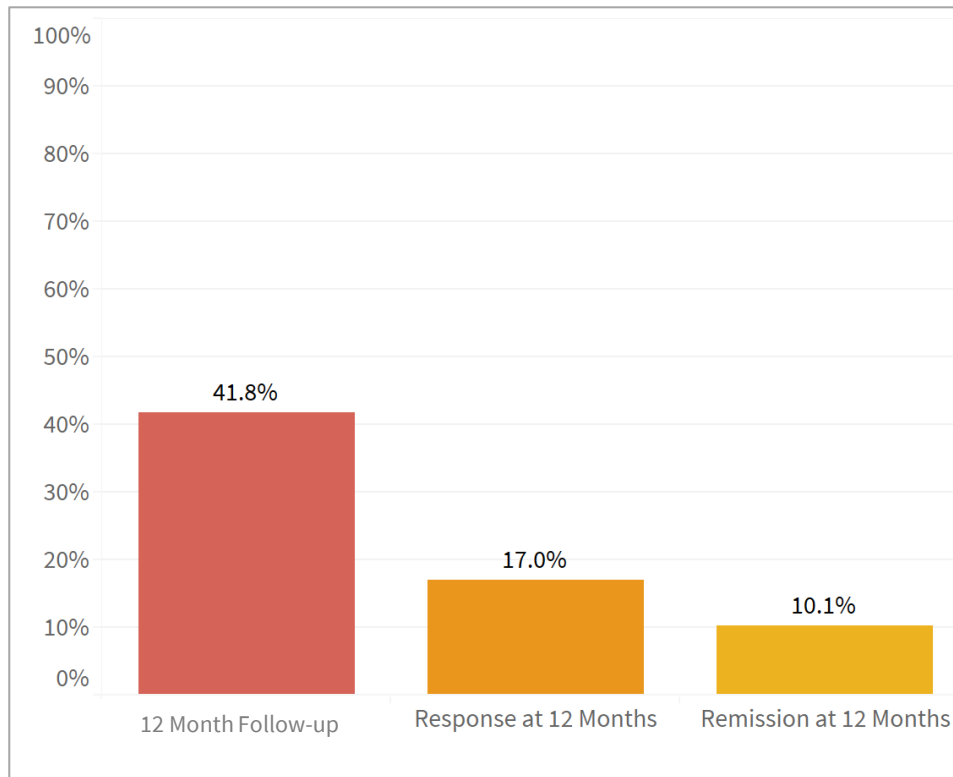
[How to read a box plot](#)

12 MONTH DEPRESSION MEASURES

Statewide results

2020 report year (2019 dates of service)

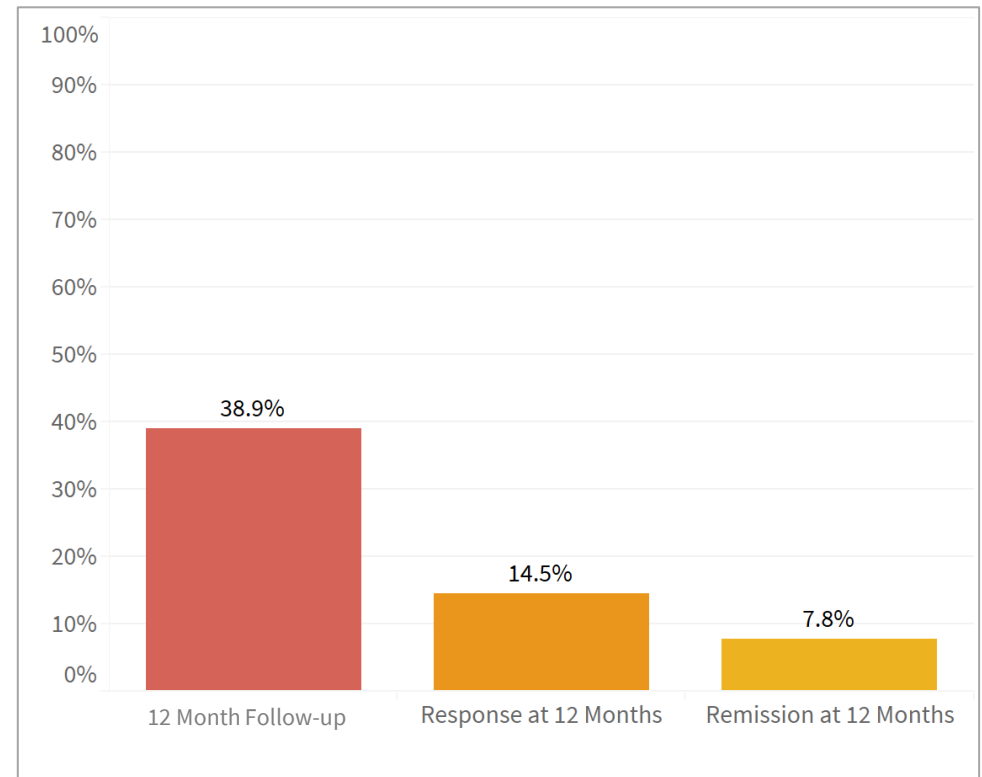
ADULTS



On average, out of every 100 adults with depression:

- Approximately 42 adults are re-assessed with a PHQ-9/PHQ-9M tool after 12 months (+/- 60 days).
- Approximately 17 adults have a response to treatment.
- Approximately ten adults are considered in remission.

ADOLESCENTS



On average, out of every 100 adolescents with depression:

- Approximately 39 adolescents are re-assessed with a PHQ-9/PHQ-9M tool after 12 months (+/- 60 days)
- Approximately 15 adolescents have a response to treatment.
- Approximately eight adolescents are considered in remission.

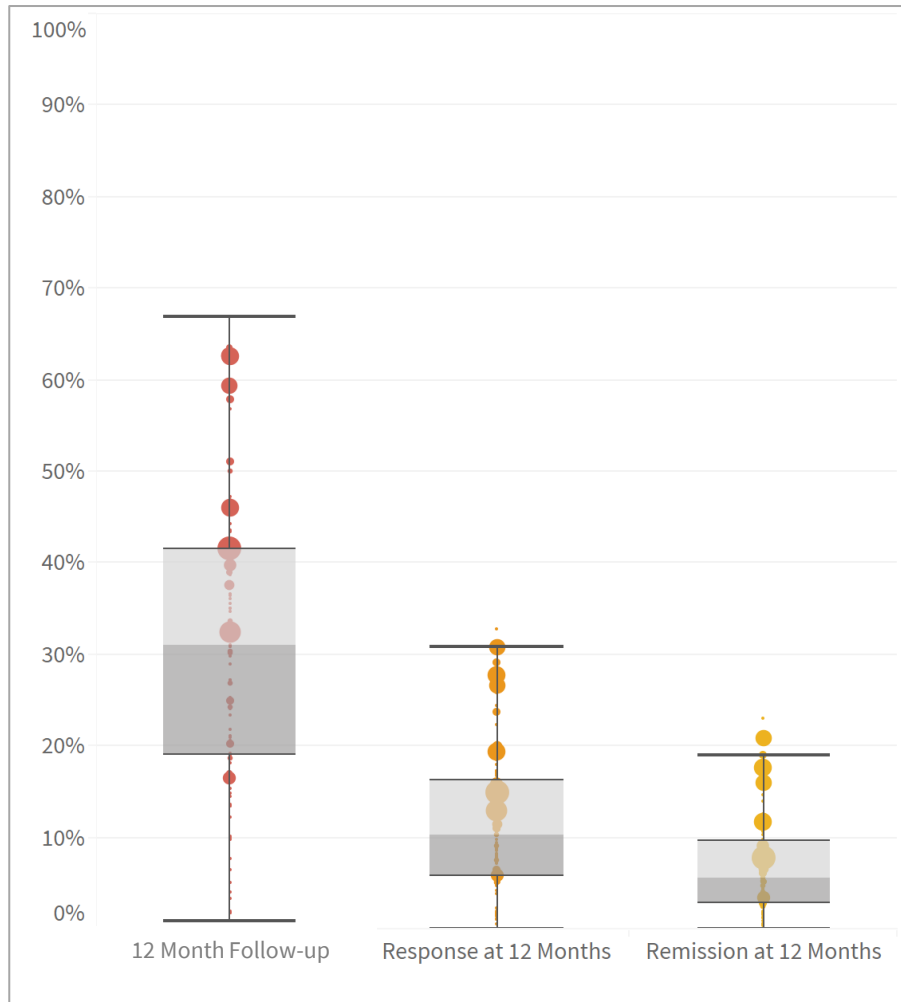
Response is defined as having at least 50% reduction of initial index PHQ-9/PHQ-9M score. **Remission** is defined as having a PHQ-9/PHQ-9M score of less than 5.

12 MONTH DEPRESSION MEASURES

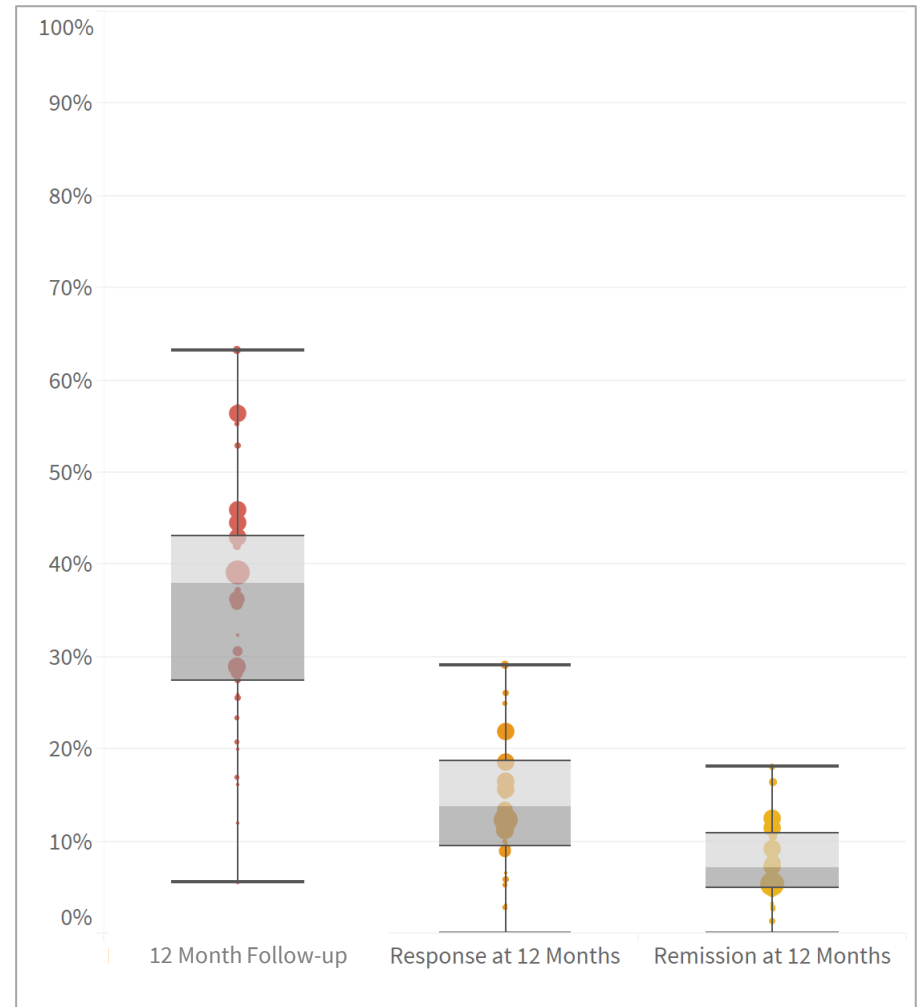
Variation by medical group*

2020 report year (2019 dates of service)

ADULTS



ADOLESCENTS



For both adults and adolescents, the **12 Month Follow-up** measure has the widest variation among medical groups, while performance for the **Remission at 12 Months** measure is the most consistent. For both adults and adolescents, the highest performing medical groups achieved results well above the statewide average.

*Medical groups with at least 30 patients in denominator

[How to read a box plot](#)

MEDICAL GROUPS WITH HIGHEST PERFORMANCE

2020 report year (2019 dates of service)

Medical groups with above average performance on at least 50 percent of measures for which they were eligible.

MEDICAL GROUP	ADULTS						ADOLESCENTS					
	Six Month Follow-up	Response at Six Months	Remission at Six Months	12 Month Follow-up	Response at 12 Months	Remission at 12 Months	Six Month Follow-up	Response at Six Months	Remission at Six Months	12 Month Follow-up	Response at 12 Months	Remission at 12 Months
Amery Hospital and Clinic	●	●	●	●	●	●	○	○	○	○	○	○
CentraCare Health	○	○	○	○	○	○	●	●	●	●	●	●
Entira Family Clinics	●	●	●	●	●	●	●	●	●	●	●	●
Essentia Health	●	●	●	●	●	●	○	○	○	○	○	○
HealthPartners Central Minnesota Clinics	●	●	●	●	●	●	○	○	○	○	○	○
HealthPartners Clinics	●	●	●	●	●	●	○	●	○	●	○	○
Lake Region Healthcare	●	●	●	●	●	●	○	●	○	●	○	●
Lakewood Health System	○	●	○	●	○	●	<	<	<	<	<	<
Mankato Clinic, Ltd.	●	●	●	●	●	●	●	●	●	●	●	●
Olmsted Medical Center	●	●	●	●	●	●	○	○	○	○	○	○
Ortonville Area Health Services	●	●	●	●	●	○	<	<	<	<	<	<
Park Nicollet Health Services	●	●	●	●	●	●	●	●	○	●	○	●
Sanford Health	●	●	●	●	●	●	○	○	○	○	○	○
Westfields Hospital and Clinic	●	●	●	●	●	●	<	<	<	<	<	<

● Above statewide average

○ Average or below statewide average

< Not reportable (too few patients in measure denominator)

DEPRESSION MEASURES

Measure Definitions

MENTAL HEALTH SCREENING

- **Adolescent Mental Health and/or Depression Screening:** The percentage of patients ages 12-17 who were screened for mental health and/or depression at a well-child visit using a specified tool. *Note: Adolescents diagnosed with depression are excluded from this measure.*
- **PHQ-9/PHQ-9M Utilization*:** The percentage of patients 12 years of age and older with a diagnosis of Major Depression or Dysthymia who also have a completed PHQ-9/PHQ-9M tool during the measurement period.

SIX MONTH MEASURES

- **Six Month Follow-up*:** The percentage of patients 12 years of age and older with depression who have a completed PHQ-9/PHQ-9M tool within six months after the index event (+/- 60 days)
- **Response at Six Months*:** The percentage of patients with depression who demonstrated a response to treatment (at least 50 percent improvement) six months after the index event (+/- 60 days)
- **Remission at Six Months*:** The percentage of patients with depression who reached remission (PHQ-9/PHQ-9M score less than five) six months after the index event (+/- 60 days)

12 MONTH MEASURES

- **12 Month Follow-up*:** The percentage of patients with depression who have a completed PHQ-9/PHQ-9M tool within 12 months after the index event (+/- 60 days)
- **Response at 12 Months*:** The percentage of patients with depression who demonstrated a response to treatment (at least 50 percent improvement) 12 months after the index event (+/- 60 days)
- **Remission at 12 Months*:** The percentage of patients with depression who reached remission (PHQ-9/PHQ-9M score less than five) 12 months after the index event (+/- 60 days)

*Results stratified by adolescents (ages 12-17) and adults (ages 18 and older)

DATA COLLECTION

Data for the measures included in this report are collected through a method known as Direct Data Submission (DDS). Data are reported at two levels: by clinic site and medical group.

Clinic abstractors collect data from medical records either by extracting the data from an electronic medical record (EMR) via data query or from abstraction of paper-based medical records. All appropriate Health Insurance Portability and Accountability (HIPAA) requirements are followed for data transfer to MNMCM.

MNCM staff conduct an extensive validation process including pre-submission data certification, post submission data quality checks of all files, and audits of the data source for selected clinics. For medical record audits, MNMCM uses NCQA's "8 and 30" File Sampling Procedure, developed in 1996 in consultation with Johns Hopkins University. For a detailed description of this procedure, see www.ncqa.org. Audits are conducted by trained MNMCM auditors who are independent of medical groups and/or clinics. The validation process ensures the data are reliable, complete and consistent.

ELIGIBLE POPULATION SPECIFICATIONS

The eligible population for each measure is identified by a medical group on behalf of their individual clinics. MNMCM's 2020 DDS Data Collection Guides provide technical specifications for the standard definitions of the eligible population, including elements such as age.

NUMERATOR SPECIFICATIONS

For DDS measures, the numerator is the number of patients identified from the eligible population who meet the numerator criteria. The numerator is calculated using the clinical quality data submitted by the medical group; this data is verified through MNMCM's validation process.

DATA COLLECTION CONTINUED

CALCULATING RATES

Due to the dynamic nature of patient populations, rates and 95 percent confidence intervals are calculated for each measure for each medical group/clinic regardless of whether the full population or a sample is submitted. The statewide average rate is displayed when comparing a single medical group/clinic to the performance of all medical groups/clinics to provide context. The statewide average is calculated using all data submitted to MNCM which may include some data from clinics located in neighboring states.

RISK ADJUSTMENT

Risk adjustment is a technique used to enable fair comparisons of clinics/medical groups by adjusting for the differences in risk among specific patient groups. MNCM uses an “Actual to Expected” methodology for risk adjustment. This methodology does not alter a clinic/medical group’s result; the actual rate remains unchanged. Instead, each clinic/medical group’s rate is compared to an “expected rate” for that clinic/medical group based on the specific characteristics of patients seen by the clinic/medical group, compared to the total patient population.

All expected values for DDS measures are calculated using a logistic regression model including the following variables: health insurance product type (commercial, Medicare, Medicaid, uninsured, unknown), patient age, and deprivation index. The deprivation index was added in 2018 and includes ZIP code level average of poverty, public assistance, unemployment, single female with child(ren), and food stamps (SNAP) converted to a single index that is a proxy for overall socioeconomic status.

A population proportions test is used to determine whether there is a statistically significant difference between the expected and actual rates of optimally managed patients attributed to each clinic/medical group. The methodology uses a 95 percent test of significance.

DATA COLLECTION CONTINUED

APPENDIX TABLES/MNHEALTHSCORES

The tables for the risk-adjusted measures include the following information:

- **Medical group/clinic name**
- **MNHealthScore**
 - ★ Top performer: The top five medical groups and top 15 clinics that achieved rates with the highest success rate after accounting for variation in patient mix, as long as they are also above the statewide average.
 - ▲ Above average: Clinic or medical group's actual rate is significantly above its expected rate
 - Average: Clinic or medical group's actual rate is equivalent to its expected rate
 - ▼ Below average: Clinic or medical group's actual rate is significantly below its expected rate
- **Denominator**: Number of patients at a medical group/clinic site that meet the denominator criteria for the measure.
- **Actual Rate**: Actual percentage of patients meeting criteria (unadjusted rate).
- **Expected Rate**: Expected percentage of patients meeting criteria based on the clinic's/medical group's mix of patient risk (adjusted rate).
- **Actual/Expected Ratio**: Actual percentage of patients meeting criteria divided by the expected percentage of patients meeting criteria for the clinic's/medical group's mix of patient risk.

THRESHOLDS FOR PUBLIC REPORTING

MNCM has established minimum thresholds for public reporting of DDS measures to ensure statistically reliable rates. Only medical groups and clinics that meet the threshold of 30 patients in the denominator of each measure are publicly reported.

SUMMARY OF DEPRESSION MEASURE CHANGES

The following changes were implemented during the 2020 report year:

CHANGE	PREVIOUS REPORT YEAR	CURRENT REPORT YEAR
Age criteria	18 years and older at time of encounter	12 years and older at time of encounter
Expansion of follow-up window	+/- 30 days <ul style="list-style-type: none"> 6-month measures: 5 – 7 months 12-month measures: 11 – 13 months 	+/- 60 days <ul style="list-style-type: none"> 6-month measures: 4 – 8 months 12-month measures: 10 – 14 months
Acceptable PRO tool	PHQ-9 only	PHQ-9 or PHQ-9M (regardless of age)
Required Exclusions	<ul style="list-style-type: none"> Bipolar disorder Personality disorder 	<ul style="list-style-type: none"> Bipolar disorder Schizophrenia/psychotic disorder
Allowable Exclusions	<ul style="list-style-type: none"> Permanent nursing home resident Hospice/palliative care Death 	<ul style="list-style-type: none"> Permanent nursing home resident Hospice/palliative care Death Personality disorder – emotionally labile Pervasive developmental disorder
Behavioral health provider	Diagnosis of major depression or dysthymia must be in the primary position for encounters in a behavioral health setting.	No restrictions on major depression or dysthymia diagnosis positioning for behavioral health providers.
Allowable timing of PHQ-9 /PHQ-9M	PHQ-9 score at the time of encounter	PHQ-9/PHQ-9M score at time of encounter or up to seven days prior