MINNESOTA HEALTH CARE QUALITY REPORT

PART 1: CLINICAL QUALITY MEASURES REPORTED BY MEDICAL GROUPS

Results for care delivered in 2021 | Report released September 2022

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ABOUT 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 quality, costs and equity. While Minnesota has some of the best health indicators in the country, there continues to be wide variation in health care quality and wide disparities in outcomes for different population groups. Quality measurement in health care delivers value to patients, providers, payers, and purchasers and the community.

ABOUT THIS REPORT

Starting in 2022, MN Community Measurement's *Health Care Quality Report* will be released in three parts. The goal of this change is to provide more timely public reporting of information on health care quality, as data are received at different times of the year:

- Part 1: Clinical quality measures reported by medical groups
- Part 2: Clinical quality measures reported by health plans
- Part 3: Top performing medical groups across all quality measures

This report summarizes all clinical quality measures reported by medical groups for the 2021 measurement year and includes:

- Summary of performance rates by measure
- **RETURNING!** Achievable benchmark goals by measure
- Variation in performance rates across medical groups for each measure
- Trend in performance rates across multiple years for each measure
- **NEW!** Variation in performance rates across Minnesota three-digit ZIP code regions

Medical group and clinic performance rates are available through MNCM's Dynamic Tables, an interactive tool available here. Medical group and clinic profile pages through MNHealthScores are also available here.

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KEY FINDINGS IN 2021

- Except for the Adolescent Mental Health and/or Depression Screening and the adult 12 Month Depression Care measures, most of the 2021 rates remain significantly below the 2019 rate, or the pre-pandemic rate. However, the gap between current and pre-pandemic rates narrowed in 2021 as the health care system continues to recover from the impacts of the COVID-19 pandemic.

- The data also show a return toward more typical patient volumes in 2021. During the first year of the pandemic fewer people were accessing care for preventive services and management of chronic conditions, raising concerns about potential long-term impacts on health from delayed or forgone care.

- The largest increases in rates in 2021 compared to 2020 occurred in the Follow-up PHQ-9/9M at 12 Months rates for both adolescents (+4.5 percentage points) and adults (+4.3 percentage points).

- Across all measures, there continues to be significant variation in performance among medical groups, with the largest variation occurring in the Optimal Asthma Control measures for both the adult and child populations.

- A new geographic analysis showcases the variation in rates among three-digit ZIP code regions across the state of Minnesota. This analysis provides valuable insight into the regions within the state where there is room for improvement in performance rates while also providing the opportunity to highlight regions where performance is above average. For example, both the 553xx (Minnetonka) and 559xx (Rochester) three-digit ZIP code regions had above average rates on six out of the eight measures included in the geographic analysis, the most of any region.

STATEWIDE RESULTS FOR PRIMARY CARE MEASURES
Adults
2021 measurement year

| QUALITY MEASURE		2021 Statewide Average	2021 Benchmark	Gap	Minimum	Maximum	Variation Min/Statewide Average/Benchmark/Max
Preventive Health & Chronic Conditions	Colorectal Cancer Screening	72.2%	77.1%	70,705	0.0%	80.9%	
	Optimal Asthma Control	50.3%	66.1%	22,883	0.0%	99.6%	
	Optimal Diabetes Care	43.6%	47.6%	13,867	1.9%	55.8%	
	Optimal Vascular Care	56.5%	59.4%	5,867	11.5%	75.3%	
Depression Care	PHQ-9/9M Utilization	71.7%	94.4%	47,168	0.0%	100.0%	
	Follow-up PHQ-9/9M at Six Months	45.3%	54.1%	10,608	0.0%	72.1%	
	Response at Six Months	18.1%	23.4%	6,288	0.0%	33.1%	
	Remission at Six Months	10.3%	14.1%	4,442	0.0%	20.5%	
	Follow-up PHQ-9/9M at 12 Months	43.9%	52.2%	10,557	0.0%	72.2%	
	Response at 12 Months	18.1%	21.4%	4,975	0.0%	35.8%	
	Remission at 12 Months	10.6%	13.5%	3,888	0.0%	23.6%	

Benchmark: 90th percentile of medical groups or 90th percentile of patients, whichever is lower. This method prevents the benchmark from being too heavily influenced by only a few medical groups or by medical groups with small numbers of patients.

Gap: The additional number of patients who would reach optimal status or goal if all medical groups' rates were at least at benchmark.

In response to requests from community members, MNCM is reintroducing the 90th percentile benchmark in the 2022 report. This table provides an overview of the statewide rates by measure and identifies an achievable goal for quality care through the benchmark rate for the adult population.

For the adult population, the PHQ-9/9M Utilization measure has the largest gap between the statewide average and the benchmark for the measure. Just over 47,000 patients with depression would need to be added to the numerator in order to reach the benchmark goal of 94.4%.

How to read variation chart
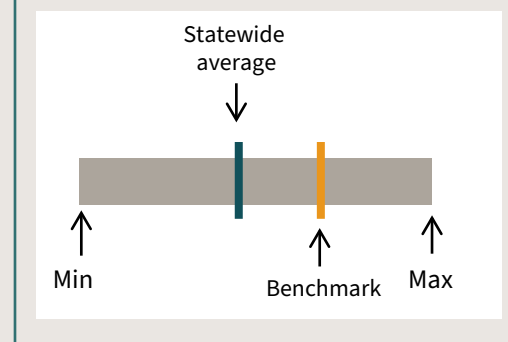
Statewide average

Min   Benchmark   Max

[Click here](#) for a complete list of measure definitions.

MEASURE		MEASUREMENT YEAR					
		2016	**2017**	**2018**	**2019**	**2020^**	**2021**
Preventive Health & Chronic Conditions	**Colorectal Cancer Screening**	72.5%	70.7% ▼	71.2% ▲	73.2% ▲	70.6% ▼	72.2% ▲
	Optimal Asthma Control	49.5%	50.8% ▲	53.3% ▲	53.4%	46.6% ▼	50.3% ▲
	Optimal Diabetes Care	44.8%	44.9%	44.9%	45.4% ▲	40.6% ▼	43.6% ▲
	Blood pressure control	83.7%	83.4% ▼	83.1% ▼	83.1%	76.0% ▼	79.0% ▲
	Daily aspirin use	99.4%	99.5%	99.4% ▼	99.3% ▼	99.1% ▼	99.1%
	HbA1c control	69.4%	69.2% ▼	69.5%	70.2% ▲	67.2% ▼	70.5% ▲
	Statin use	86.9%	87.8%	88.1% ▲	88.3%	87.4% ▼	87.9% ▲
	Tobacco-free	83.7%	83.9%	84.0%	84.2%	84.0%	84.1%
	Optimal Vascular Care	61.6%	61.5% ▼	61.1% ▼	60.3% ▼	53.8% ▼	56.5% ▲
	Blood pressure control	84.1%	83.5% ▼	83.7%	83.9%	76.9% ▼	79.9% ▲
	Daily aspirin use	93.6%	93.3% ▼	92.5% ▼	90.9% ▼	88.0% ▼	89.8% ▲
	Statin use	90.9%	91.6% ▲	91.6%	91.7%	90.9% ▼	91.5% ▲
	Tobacco-free	82.5%	82.4%	82.4%	82.5%	82.0% ▼	82.4% ▲
Depression Care	**PHQ-9/9M Utilization**	N/A	N/A	N/A	77.7%	68.7% ▼	71.7% ▲
	Follow-up PHQ-9/9M at Six Months	N/A	N/A	N/A	48.5%	47.9% ▼	45.3% ▼
	Response at Six Months	N/A	N/A	N/A	19.4%	18.9%	18.1% ▼
	Remission at Six Months	N/A	N/A	N/A	11.3%	11.0%	10.3% ▼
	Follow-up PHQ-9/9M at 12 Months	N/A	N/A	N/A	41.8%	39.6% ▼	43.9% ▲
	Response at 12 Months	N/A	N/A	N/A	17.0%	16.5% ▼	18.1% ▲
	Remission at 12 Months	N/A	N/A	N/A	10.1%	9.9%	10.6% ▲

RATES OVER TIME
ADULTS

▲ Significantly higher than previous year (based on 95% confidence interval)

▼ Significantly lower than previous year (based on 95% confidence interval)

N/A Measure underwent significant changes in 2019 so comparison to prior years is not available

^ Due to the COVID-19 pandemic, we urge caution in using 2020 data for comparison to other years and to draw general conclusions about quality of care. In many respects, 2020 should be considered a new baseline from which recovery should be measured.

Click here for a complete list of measure definitions.

Preventive Health & Chronic Conditions

Colorectal Cancer Screening
- 2019: 73.2%
- 2020: 70.6% *
- 2021: 72.2% *

Optimal Asthma Control
- 2019: 53.4%
- 2020: 46.6% *
- 2021: 50.3% *

Optimal Diabetes Care
- 2019: 45.4%
- 2020: 40.6% *
- 2021: 43.6% *

Optimal Vascular Care
- 2019: 60.3%
- 2020: 53.8% *
- 2021: 56.5% *

Depression Care

PHQ-9/9M Utilization
- 2019: 77.7%
- 2020: 68.7% *
- 2021: 71.7% *

Follow-up PHQ-9/9M at Six Months
- 2019: 48.5%
- 2020: 47.9% *
- 2021: 45.3% *

Response at Six Months
- 2019: 19.4%
- 2020: 18.9%
- 2021: 18.1% *

Remission at Six Months
- 2019: 11.3%
- 2020: 11.0%
- 2021: 10.3% *

Follow-up PHQ-9/9M at 12 Months
- 2019: 41.8%
- 2020: 39.6% *
- 2021: 43.9% *

Response at 12 Months
- 2019: 17.0%
- 2020: 16.5% *
- 2021: 18.1% *

Remission at 12 Months
- 2019: 10.1%
- 2020: 9.9%
- 2021: 10.6% *

Legend: 2019 | 2020 ^ | 2021

(x-axis: 0% to 90%)
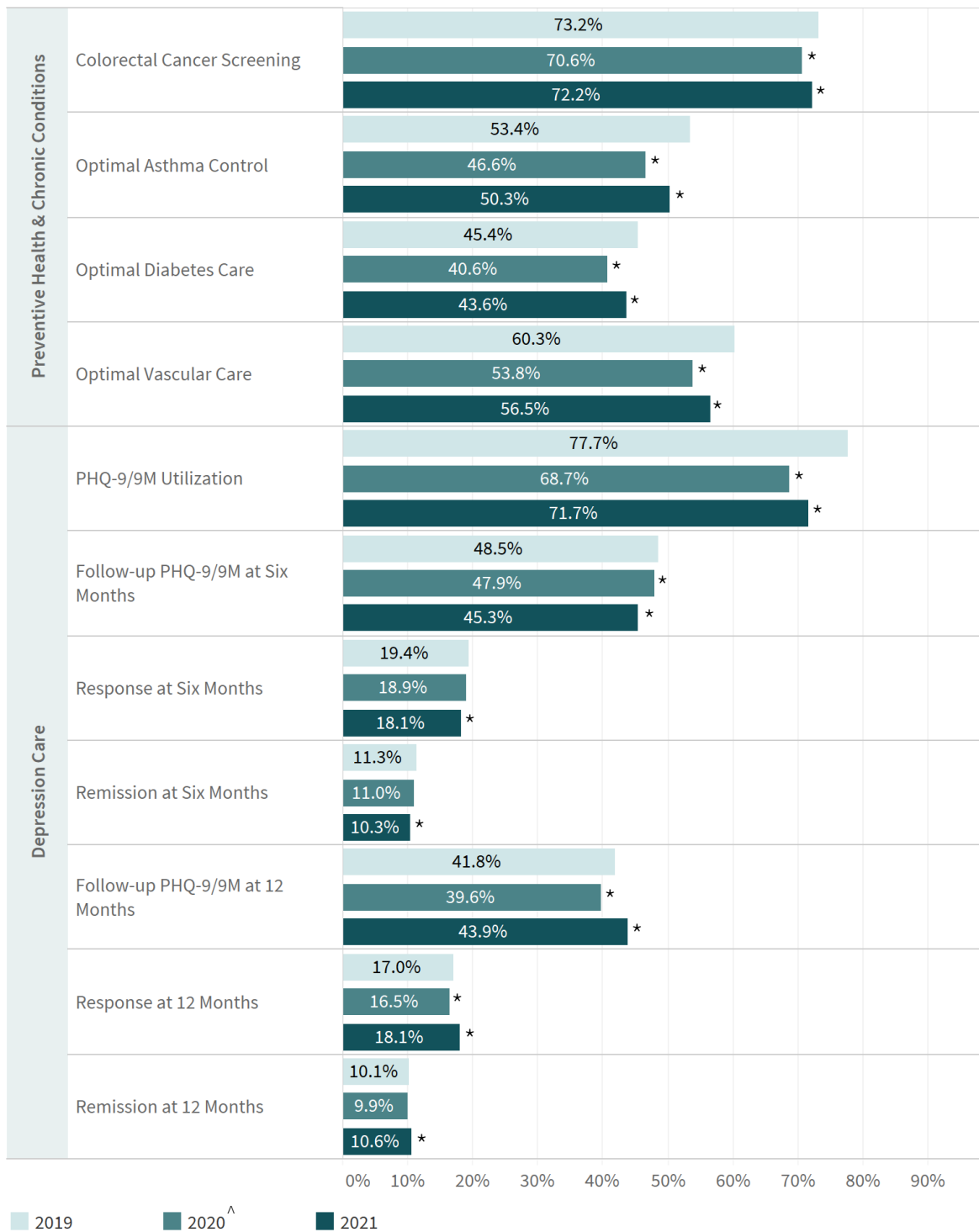
RATE CHANGES
ADULTS

- For almost all measures, performance rates significantly increased in 2021 compared to 2020.

- Apart from the Follow-up PHQ-9/9M at 12 Months measure, the rates for all other measures in 2021 remained significantly lower than the rates in 2019.

- While all of the six-month depression measures had a significant decrease in 2021 compared to 2020, a large part of the assessment period for the calculation of these measures took place in 2020. For more information on the assessment periods for the depression measures, click here.

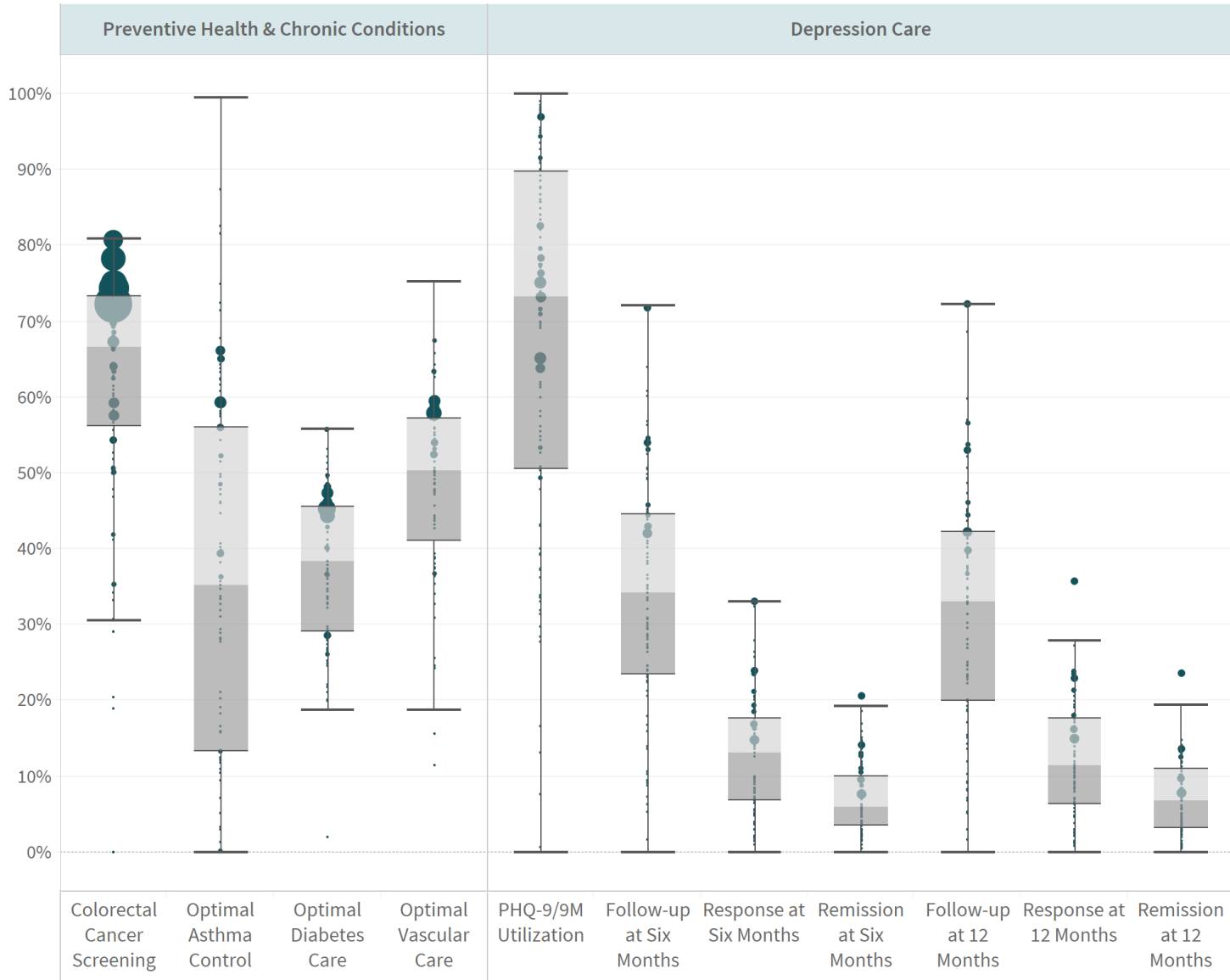* Significant change from previous year

^ Due to the COVID-19 pandemic, we urge caution in using 2020 data for comparison to other years and to draw general conclusions about quality of care. In many respects, 2020 should be considered a new baseline from which recovery should be measured.

Click here for a complete list of measure definitions.

- There continues to be significant variation among all measures for adults.

- The Optimal Asthma Control and PHQ-9/9M Utilization measures have the largest variation across medical groups for the adult population.
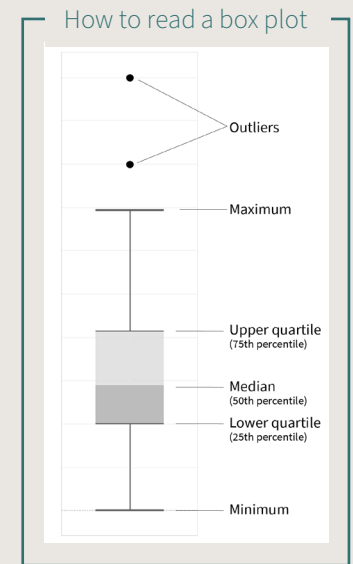
How to read a box plot

Outliers

Maximum

Upper quartile
(75th percentile)

Median
(50th percentile)

Lower quartile
(25th percentile)

Minimum

Does not include medical groups with less than 30 patients for a measure

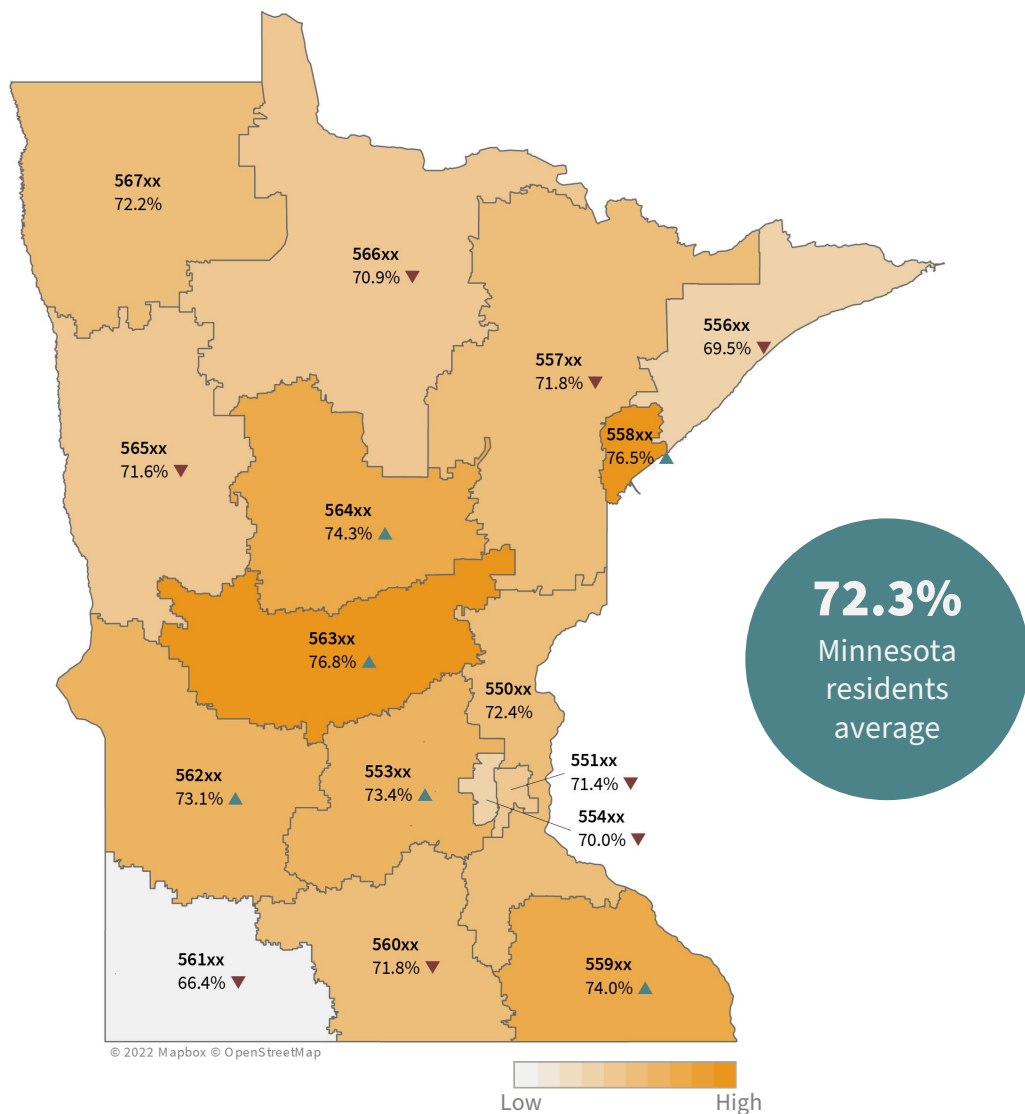Click here for a complete list of measure definitions.

RATE VARIATION BY THREE-DIGIT ZIP CODE
Colorectal Cancer Screening
2021 measurement year

567xx
72.2%

566xx
70.9% ▼

556xx
69.5% ▼

557xx
71.8% ▼

558xx
76.5% ▲

565xx
71.6% ▼

564xx
74.3% ▲

563xx
76.8% ▲

550xx
72.4%

551xx
71.4% ▼

554xx
70.0% ▼

562xx
73.1% ▲

553xx
73.4% ▲

561xx
66.4% ▼

560xx
71.8% ▼

559xx
74.0% ▲

72.3%
Minnesota residents average

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Low ——— High

Minnesota resident average includes only patients submitted with a Minnesota ZIP code as their place of residence.

▲ Significantly higher than Minnesota resident average (based on 95% confidence interval)

▼ Significantly lower than Minnesota resident average (based on 95% confidence interval)

The rate of Colorectal Cancer Screening was lowest in the 561xx region and highest in the 558xx and 564xx regions.

Eight regions had screening rates that were significantly below the Minnesota resident average, while six regions had screening rates that were significantly above.

Three-digit ZIP Code	Major City
550xx	Stillwater
551xx	St. Paul
553xx	Minnetonka
554xx	Minneapolis
556xx	Two Harbors
557xx	Cloquet
558xx	Duluth
559xx	Rochester
560xx	Mankato
561xx	Windom
562xx	Willmar
563xx	St. Cloud
564xx	Brainerd
565xx	Detroit Lakes
566xx	Bemidji
567xx	Thief River Falls

RATE VARIATION BY THREE-DIGIT ZIP CODE
Optimal Asthma Control - Adults
2021 measurement year

The rate of Optimal Asthma Control among adults was lowest in the 567xx region and highest in the 550xx region.

12 regions had optimal control rates that were significantly below the Minnesota resident average, while four regions had optimal control rates that were significantly above.

51.3%
Minnesota residents average

Map labels:
- 567xx 10.9% ▼
- 566xx 40.0% ▼
- 556xx 19.5% ▼
- 557xx 39.3% ▼
- 558xx 40.6% ▼
- 565xx 45.5% ▼
- 564xx 45.0% ▼
- 563xx 45.9% ▼
- 550xx 57.9% ▲
- 551xx 56.0% ▲
- 553xx 56.3% ▲
- 554xx 52.3% ▲
- 562xx 35.5% ▼
- 561xx 24.8% ▼
- 560xx 47.9% ▼
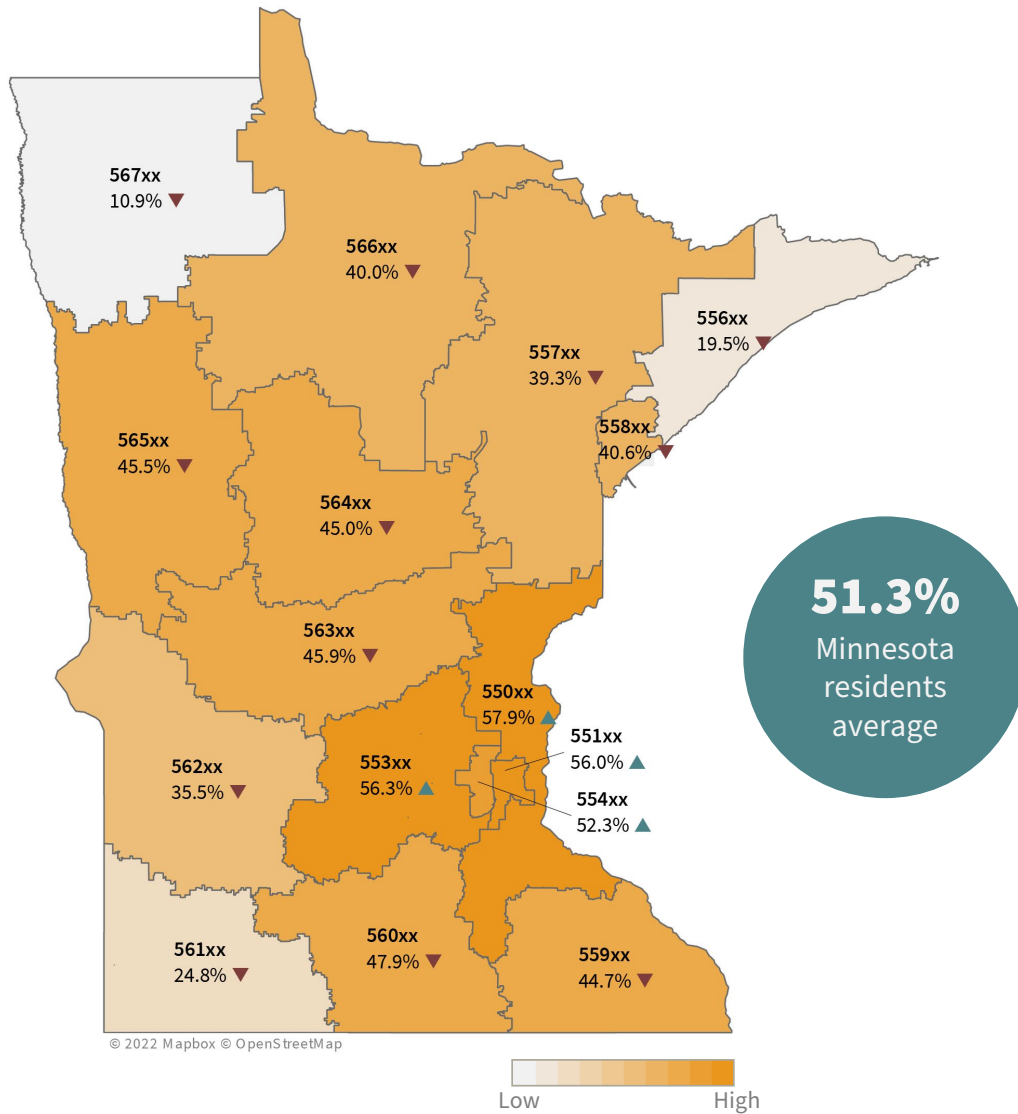- 559xx 44.7% ▼

© 2022 Mapbox © OpenStreetMap

Low — High

Minnesota resident average includes only patients submitted with a Minnesota ZIP code as their place of residence.

▲ Significantly higher than Minnesota resident average (based on 95% confidence interval)

▼ Significantly lower than Minnesota resident average (based on 95% confidence interval)

Three-digit ZIP Code	Major City
550xx	Stillwater
551xx	St. Paul
553xx	Minnetonka
554xx	Minneapolis
556xx	Two Harbors
557xx	Cloquet
558xx	Duluth
559xx	Rochester
560xx	Mankato
561xx	Windom
562xx	Willmar
563xx	St. Cloud
564xx	Brainerd
565xx	Detroit Lakes
566xx	Bemidji
567xx	Thief River Falls

RATE VARIATION BY THREE-DIGIT ZIP CODE
Optimal Diabetes Care
2021 measurement year

567xx 43.0%

566xx 38.9% ▼

556xx 38.4% ▼

557xx 41.5% ▼

558xx 44.4%

565xx 42.9%

564xx 43.7%

563xx 43.4%

550xx 44.7% ▲

551xx 43.3%

554xx 41.4% ▼

562xx 42.7%

553xx 45.8% ▲

561xx 44.0%

560xx 43.8%

559xx 46.3% ▲

© 2022 Mapbox © OpenStreetMap
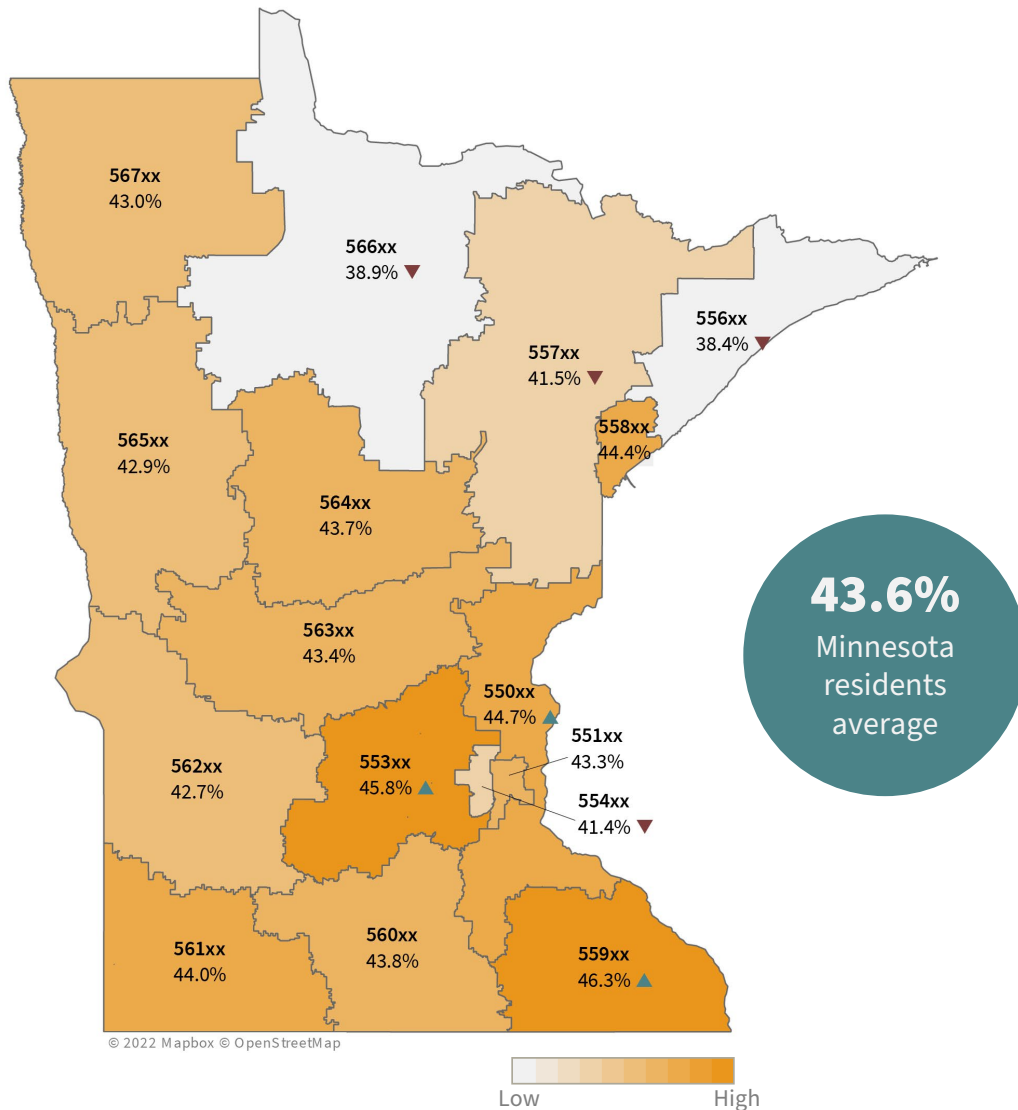
43.6%
Minnesota residents average

Low ———— High

Minnesota resident average includes only patients submitted with a Minnesota ZIP code as their place of residence.

▲ Significantly higher than Minnesota resident average (based on 95% confidence interval)

▼ Significantly lower than Minnesota resident average (based on 95% confidence interval)

Four regions had Optimal Diabetes Care rates that were significantly below the Minnesota resident average, while three regions had optimal care rates that were significantly above.

Three-digit ZIP Code	Major City
550xx	Stillwater
551xx	St. Paul
553xx	Minnetonka
554xx	Minneapolis
556xx	Two Harbors
557xx	Cloquet
558xx	Duluth
559xx	Rochester
560xx	Mankato
561xx	Windom
562xx	Willmar
563xx	St. Cloud
564xx	Brainerd
565xx	Detroit Lakes
566xx	Bemidji
567xx	Thief River Falls

RATE VARIATION BY THREE-DIGIT ZIP CODE
Optimal Vascular Care
2021 measurement year

567xx
56.1%

566xx
55.9%

556xx
61.1% ▲

557xx
54.9% ▼

565xx
52.7% ▼

558xx
57.3%

564xx
56.3%

563xx
52.3% ▼

550xx
57.3%

551xx
58.9% ▲

562xx
50.6% ▼

553xx
58.8% ▲

554xx
56.6%

56.7%
Minnesota residents average

561xx
56.6%

560xx
57.2%

559xx
54.4% ▼

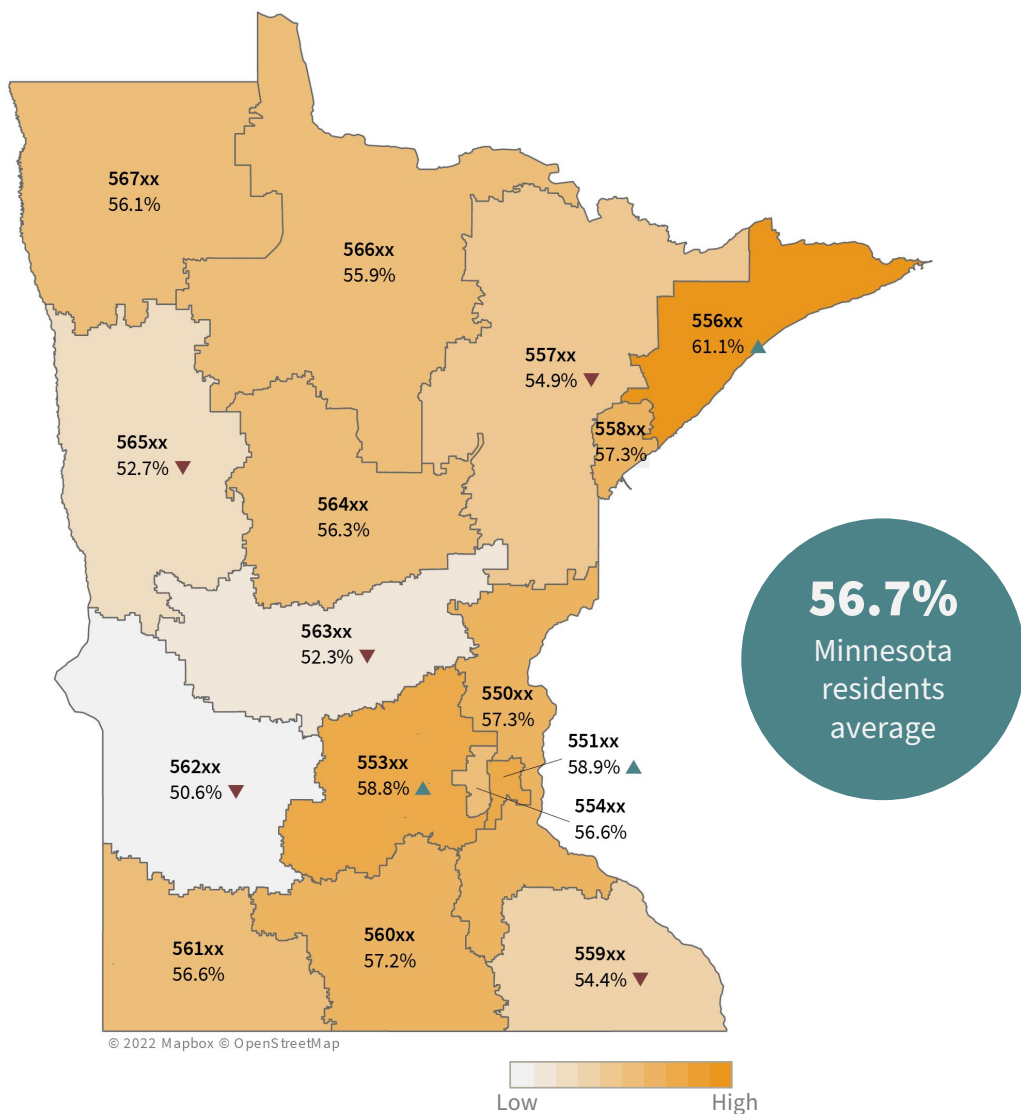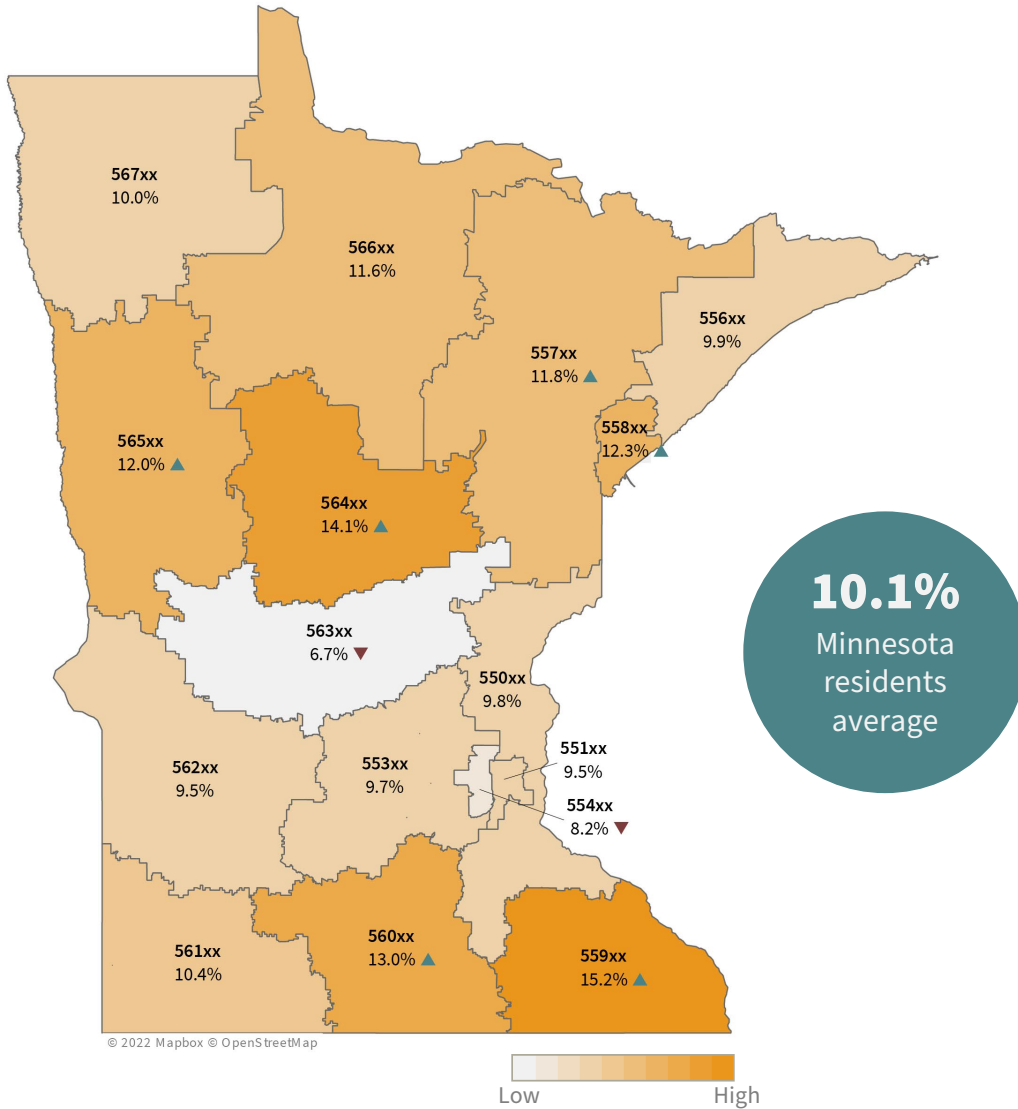© 2022 Mapbox © OpenStreetMap

Low   High

Minnesota resident average includes only patients submitted with a Minnesota ZIP code as their place of residence.

▲ Significantly higher than Minnesota resident average (based on 95% confidence interval)

▼ Significantly lower than Minnesota resident average (based on 95% confidence interval)

Five regions had Optimal Vascular Care rates that were significantly below the Minnesota resident average, while three regions had optimal care rates that were significantly above.

Three-digit ZIP Code	Major City
550xx	Stillwater
551xx	St. Paul
553xx	Minnetonka
554xx	Minneapolis
556xx	Two Harbors
557xx	Cloquet
558xx	Duluth
559xx	Rochester
560xx	Mankato
561xx	Windom
562xx	Willmar
563xx	St. Cloud
564xx	Brainerd
565xx	Detroit Lakes
566xx	Bemidji
567xx	Thief River Falls

RATE VARIATION BY THREE-DIGIT ZIP CODE
Adult Depression: Remission at Six Months
2021 measurement year

567xx
10.0%

566xx
11.6%

556xx
9.9%

557xx
11.8% ▲

565xx
12.0% ▲

558xx
12.3% ▲

564xx
14.1% ▲

563xx
6.7% ▼

550xx
9.8%

551xx
9.5%

554xx
8.2% ▼

562xx
9.5%

553xx
9.7%

561xx
10.4%

560xx
13.0% ▲

559xx
15.2% ▲

10.1%
Minnesota residents average

© 2022 Mapbox © OpenStreetMap

Low ———— High

Minnesota resident average includes only patients submitted with a Minnesota ZIP code as their place of residence.

▲ Significantly higher than Minnesota resident average (based on 95% confidence interval)

▼ Significantly lower than Minnesota resident average (based on 95% confidence interval)

The rate of Remission at Six Months among adults was lowest in the 563xx region.

Two regions had remission rates that were significantly below the Minnesota resident average, while six regions had remission rates that were significantly above.

Three-digit ZIP Code	Major City
550xx	Stillwater
551xx	St. Paul
553xx	Minnetonka
554xx	Minneapolis
556xx	Two Harbors
557xx	Cloquet
558xx	Duluth
559xx	Rochester
560xx	Mankato
561xx	Windom
562xx	Willmar
563xx	St. Cloud
564xx	Brainerd
565xx	Detroit Lakes
566xx	Bemidji
567xx	Thief River Falls

SUMMARY OF RATE VARIATION BY THREE-DIGIT ZIP CODE
Adults

2021 measurement year

Three-digit ZIP Code	Major City	Colorectal Cancer Screening	Optimal Asthma Control	Optimal Diabetes Care	Optimal Vascular Care	Depression: Remission at Six Months	# of Measures Above Average	# of Measures Below Average
Minnesota Resident Average		**72.3%**	**51.3%**	**43.6%**	**56.7%**	**10.1%**		
550xx	Stillwater	72.4%	57.9% ▲	44.7% ▲	57.3%	9.8%	2	0
551xx	St. Paul	71.4% ▼	56.0% ▲	43.3%	58.9% ▲	9.5%	2	1
553xx	Minnetonka	73.4% ▲	56.3% ▲	45.8% ▲	58.8% ▲	9.7%	4	0
554xx	Minneapolis	70.0% ▼	52.3% ▲	41.4% ▼	56.6%	8.2% ▼	1	3
556xx	Two Harbors	69.5% ▼	19.5% ▼	38.4% ▼	61.1% ▲	9.9%	1	3
557xx	Cloquet	71.8% ▼	39.3% ▼	41.5% ▼	54.9% ▼	11.8% ▲	1	4
558xx	Duluth	76.5% ▲	40.6% ▼	44.4%	57.3%	12.3% ▲	2	1
559xx	Rochester	74.0% ▲	44.7% ▼	46.3% ▲	54.4% ▼	15.2% ▲	3	2
560xx	Mankato	71.8% ▼	47.9% ▼	43.8%	57.2%	13.0% ▲	1	2
561xx	Windom	66.4% ▼	24.8% ▼	44.0%	56.6%	10.4%	0	2
562xx	Willmar	73.1% ▲	35.5% ▼	42.7%	50.6% ▼	9.5%	1	2
563xx	St. Cloud	76.8% ▲	45.9% ▼	43.4%	52.3% ▼	6.7% ▼	1	3
564xx	Brainerd	74.3% ▲	45.0% ▼	43.7%	56.3%	14.1% ▲	2	1
565xx	Detroit Lakes	71.6% ▼	45.5% ▼	42.9%	52.7% ▼	12.0% ▲	1	3
566xx	Bemidji	70.9% ▼	40.0% ▼	38.9% ▼	55.9%	11.6%	0	3
567xx	Thief River Falls	72.2%	10.9% ▼	43.0%	56.1%	10.0%	0	1

Minnesota resident average includes only patients submitted with a Minnesota ZIP code as their place of residence.

▲   Significantly higher than Minnesota resident average (based on 95% confidence interval)

▼   Significantly lower than Minnesota resident average (based on 95% confidence interval)

STATEWIDE RESULTS FOR PRIMARY CARE MEASURES
Children & Adolescents
2021 measurement year

| QUALITY MEASURE		2021 Statewide Average	2021 Benchmark	Gap	Minimum	Maximum	Variation Min/Statewide Average/Benchmark/Max
Preventive Health & Chronic Conditions	Adolescent Mental Health and/or Depression Screening	91.2%	98.4%	11,889	0.0%	100.0%	
	Optimal Asthma Control	56.2%	68.0%	42,141	0.0%	100.0%	
Adolescent Depression Care	PHQ-9/9M Utilization	75.5%	93.8%	3,041	10.9%	93.5%	
	Follow-up PHQ-9/9M at Six Months	42.8%	54.6%	1,260	7.6%	61.7%	
	Response at Six Months	14.3%	21.1%	754	0.8%	29.3%	
	Remission at Six Months	7.4%	13.1%	635	0.0%	16.7%	
	Follow-up PHQ-9/9M at 12 Months	40.1%	50.9%	1,124	8.2%	62.5%	
	Response at 12 Months	13.3%	20.0%	738	0.0%	21.5%	
	Remission at 12 Months	7.0%	10.3%	378	0.0%	15.4%	

Benchmark: 90th percentile of medical groups or 90th percentile of patients, whichever is lower. This method prevents the benchmark from being too heavily influenced by only a few medical groups or by medical groups with small numbers of patients.

Gap: The additional number of patients who would reach optimal status or goal if all medical groups' rates were at least at benchmark.

In response to requests from community members, MNCM is reintroducing the 90th percentile benchmark in the 2022 report. This table provides an overview of the statewide rates by measure and identifies an achievable goal for quality care through the benchmark rate for the child and adolescent population.

Like the adult population, the measure with the largest gap between the statewide average and the benchmark for the adolescent population is the PHQ-9/9M Utilization measure. Just over 3,000 adolescents with depression would need to be added to the numerator to reach the benchmark rate of 93.8%.

How to read variation chart
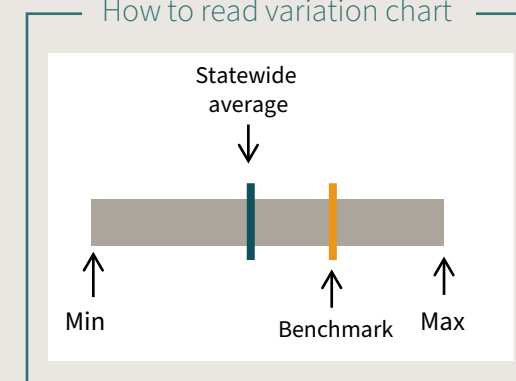
Statewide average ↓

Min ↑   Benchmark ↑   Max ↑

[Click here](#) for a complete list of measure definitions.

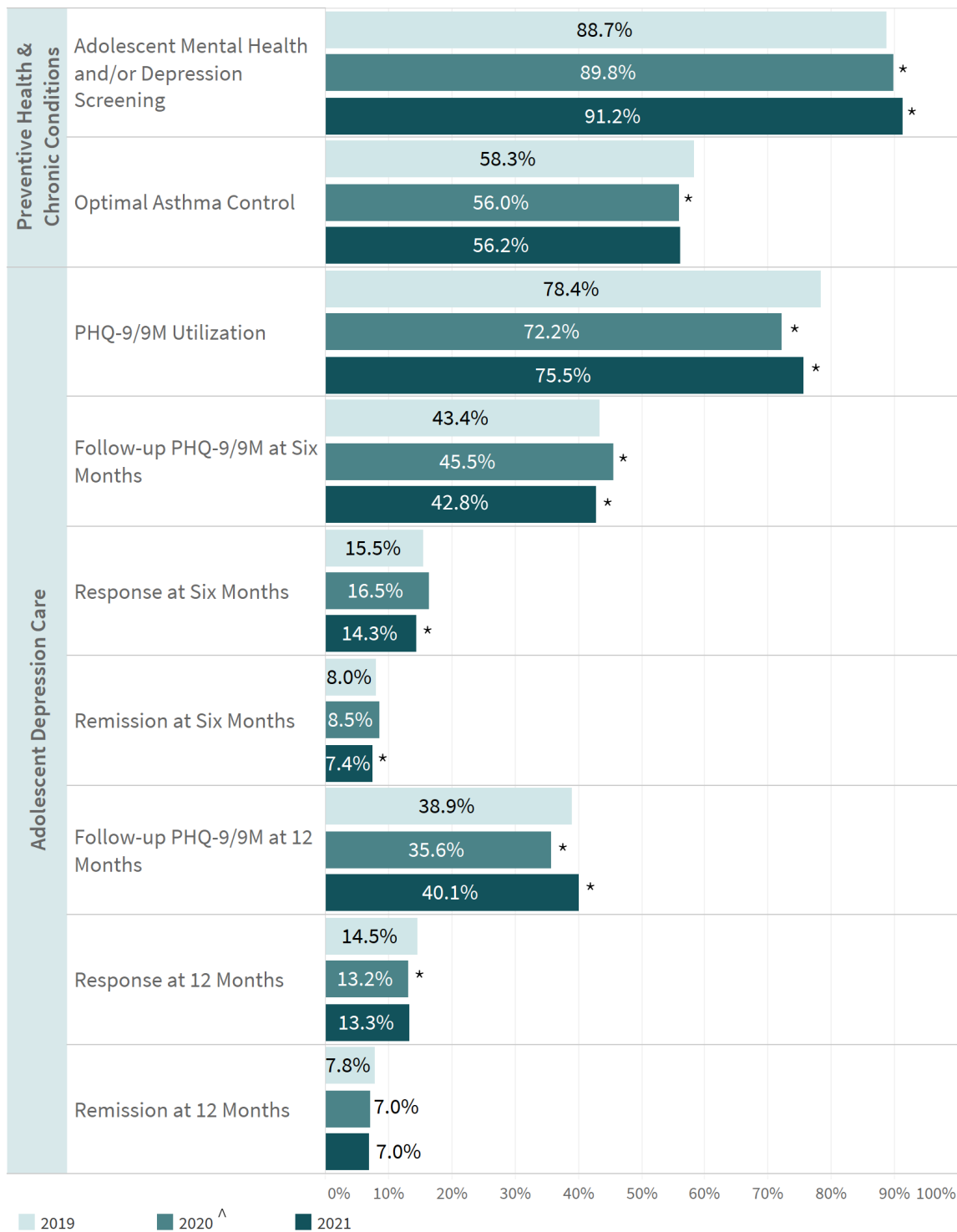| MEASURE		MEASUREMENT YEAR					
		2016	2017	2018	2019	2020^	2021
Preventive Health & Chronic Conditions	Adolescent Mental Health and/or Depression Screening	72.8%	78.8% ▲	86.1% ▲	88.7% ▲	89.8% ▲	91.2% ▲
	Optimal Asthma Control	57.0%	57.9% ▲	59.9% ▲	58.3% ▼	56.0% ▼	56.2%
Adolescent Depression Care	PHQ-9/9M Utilization	N/A	N/A	N/A	78.4%	72.2% ▼	75.5% ▲
	Follow-up PHQ-9/9M at Six Months	N/A	N/A	N/A	43.4%	45.5% ▲	42.8% ▼
	Response at Six Months	N/A	N/A	N/A	15.5%	16.5%	14.3% ▼
	Remission at Six Months	N/A	N/A	N/A	8.0%	8.5%	7.4% ▼
	Follow-up PHQ-9/9M at 12 Months	N/A	N/A	N/A	38.9%	35.6% ▼	40.1% ▲
	Response at 12 Months	N/A	N/A	N/A	14.5%	13.2% ▼	13.3%
	Remission at 12 Months	N/A	N/A	N/A	7.8%	7.0%	7.0%

RATES OVER TIME
CHILDREN & ADOLESCENTS

▲   Significantly higher than previous year (based on 95% confidence interval)

▼   Significantly lower than previous year (based on 95% confidence interval)

N/A Measure underwent significant changes in 2019 so comparison to prior years is not available

^ Due to the COVID-19 pandemic, we urge caution in using 2020 data for comparison to other years and to draw general conclusions about quality of care. In many respects, 2020 should be considered a new baseline from which recovery should be measured.

Click here for a complete list of measure definitions.

Preventive Health & Chronic Conditions

Adolescent Mental Health and/or Depression Screening
- 88.7% (2019)
- 89.8% * (2020)
- 91.2% * (2021)

Optimal Asthma Control
- 58.3% (2019)
- 56.0% * (2020)
- 56.2% (2021)

Adolescent Depression Care

PHQ-9/9M Utilization
- 78.4% (2019)
- 72.2% * (2020)
- 75.5% * (2021)

Follow-up PHQ-9/9M at Six Months
- 43.4% (2019)
- 45.5% * (2020)
- 42.8% * (2021)

Response at Six Months
- 15.5% (2019)
- 16.5% (2020)
- 14.3% * (2021)

Remission at Six Months
- 8.0% (2019)
- 8.5% (2020)
- 7.4% * (2021)

Follow-up PHQ-9/9M at 12 Months
- 38.9% (2019)
- 35.6% * (2020)
- 40.1% * (2021)

Response at 12 Months
- 14.5% (2019)
- 13.2% * (2020)
- 13.3% (2021)

Remission at 12 Months
- 7.8% (2019)
- 7.0% (2020)
- 7.0% (2021)

Legend: 2019 | 2020 ^ | 2021

Axis: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

RATE CHANGES
CHILDREN & ADOLESCENTS

- The rates for the Adolescent Mental Health and/or Depression Screening measure, PHQ-9/9M Utilization measure and the Follow-up PHQ-9/9M at 12 Month measure significantly increased in 2021 compared to 2020.

- Like the adult population, the rates for the six-month depression care measures significantly decreased in 2021 compared to 2020. Again, a large part of the assessment period for the calculation of these measures took place in 2020. For more information on the assessment periods for the depression measures, click here.

* Significant change from previous year

^ Due to the COVID-19 pandemic, we urge caution in using 2020 data for comparison to other years and to draw general conclusions about quality of care. In many respects, 2020 should be considered a new baseline from which recovery should be measured.

Click here for a complete list of measure definitions.
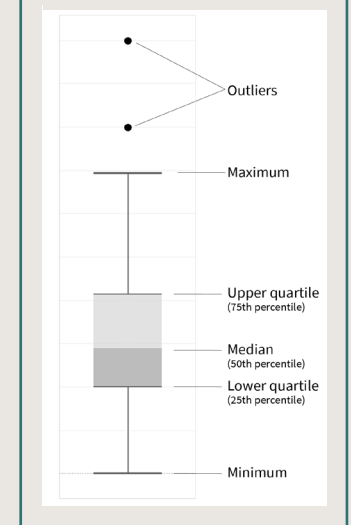
RATE VARIATION BY MEDICAL GROUP
Children & Adolescents
2021 measurement year

Does not include medical groups with less than 30 patients for a measure
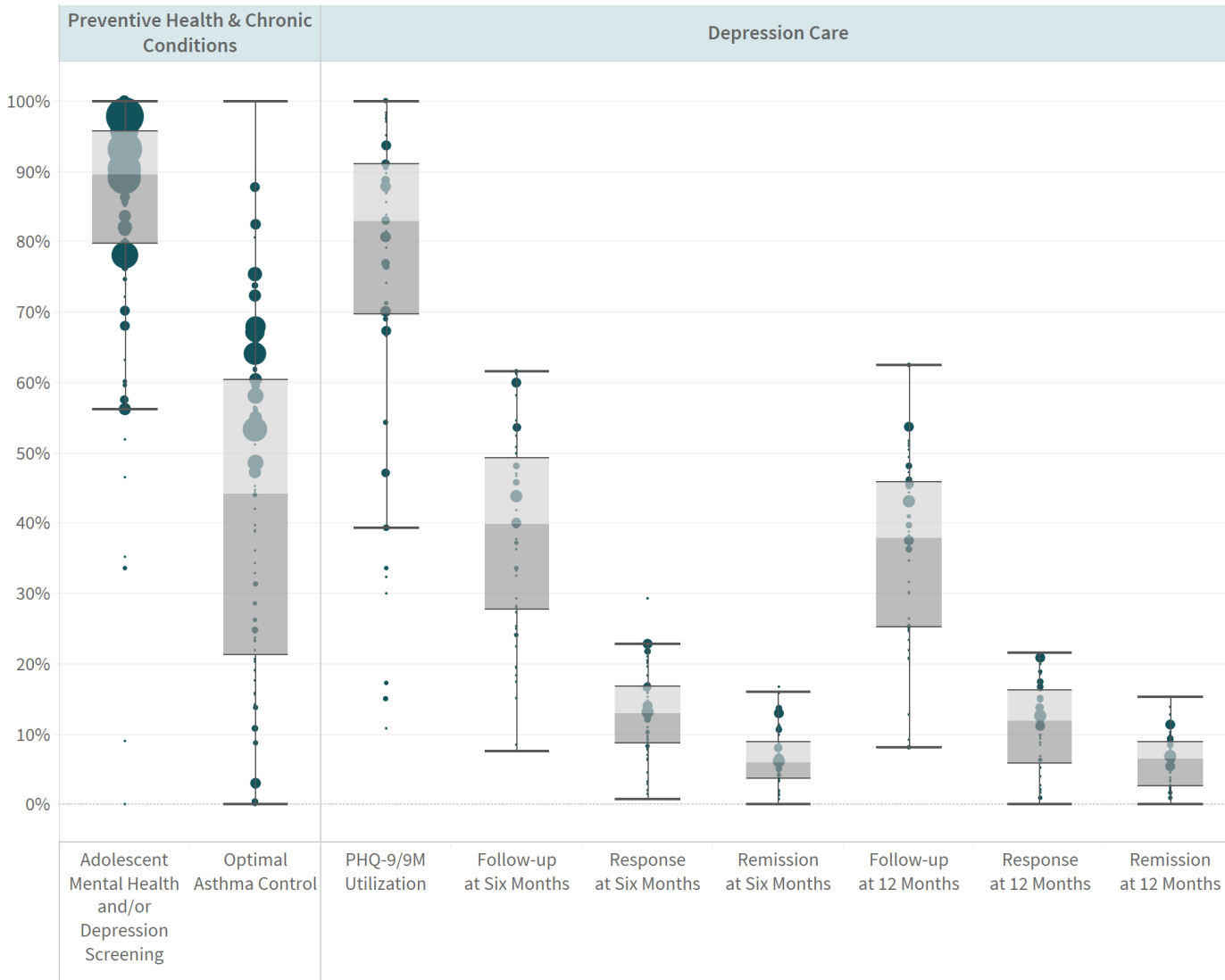
- There continues to be significant variation across all measures for children and adolescents.

- Like the adult population, the Optimal Asthma Control measure has the largest variation across medical groups for the child population.
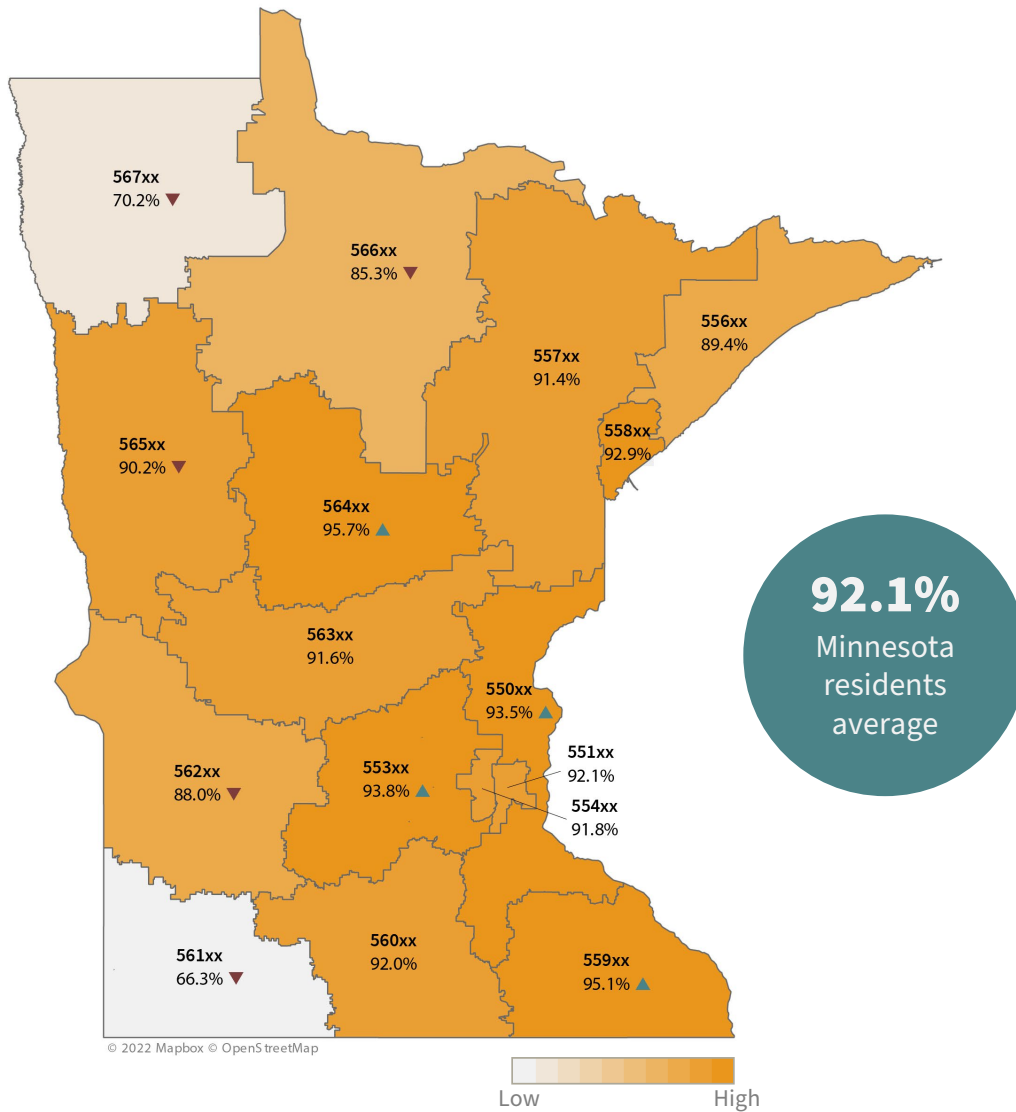
How to read a box plot

[Click here](#) for a complete list of measure definitions.

RATE VARIATION BY THREE-DIGIT ZIP CODE
Adolescent Mental Health and/or Depression Screening
2021 measurement year

Five regions had Adolescent Mental Health Screening rates that were significantly below the Minnesota resident average, while four regions had screening rates that were significantly above.

567xx
70.2% ▼

566xx
85.3% ▼

556xx
89.4%

557xx
91.4%

565xx
90.2% ▼

558xx
92.9%

564xx
95.7% ▲

563xx
91.6%

550xx
93.5% ▲

92.1%
Minnesota residents average

551xx
92.1%

554xx
91.8%

562xx
88.0% ▼

553xx
93.8% ▲

561xx
66.3% ▼

560xx
92.0%

559xx
95.1% ▲

© 2022 Mapbox © OpenStreetMap

Low   High

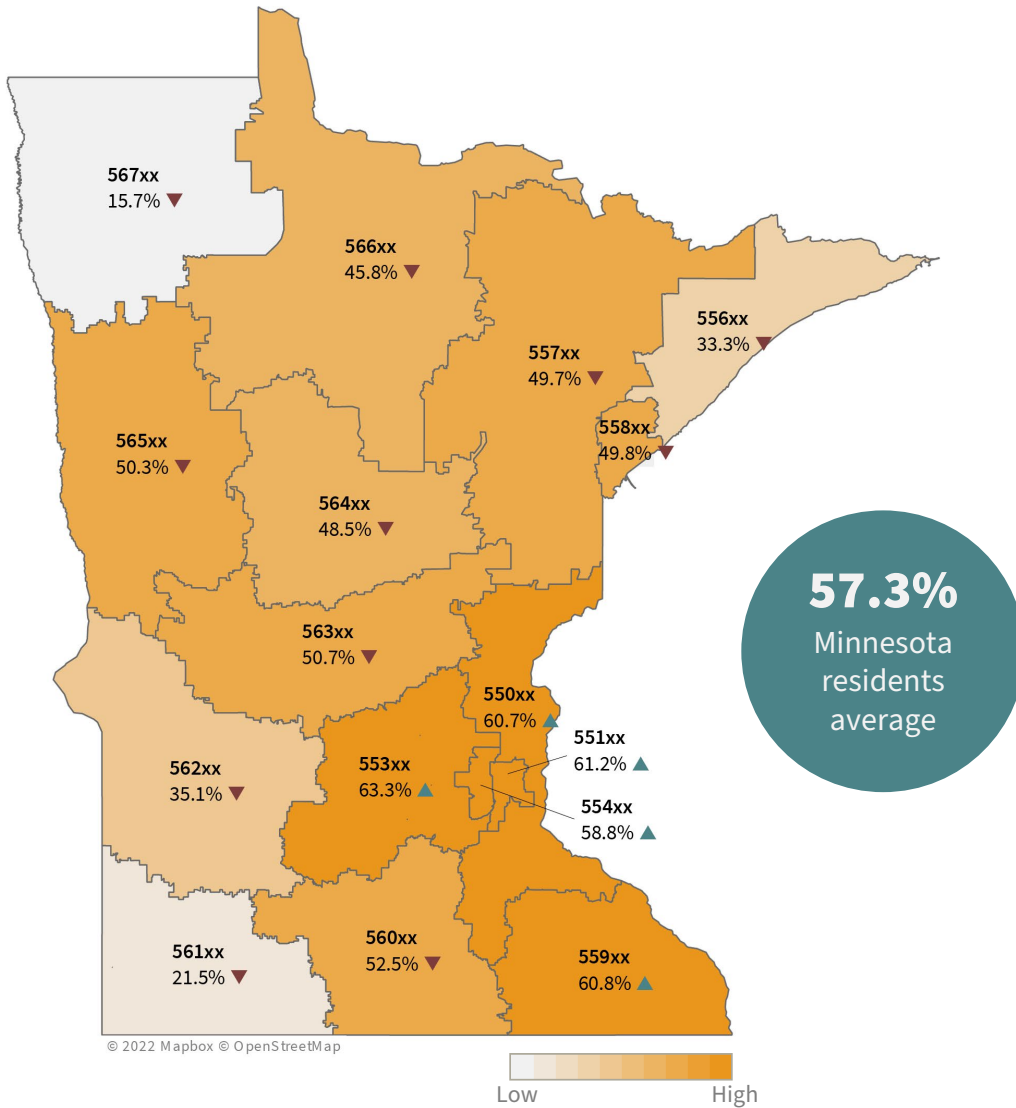| Three-digit ZIP Code	Major City
550xx	Stillwater
551xx	St. Paul
553xx	Minnetonka
554xx	Minneapolis
556xx	Two Harbors
557xx	Cloquet
558xx	Duluth
559xx	Rochester
560xx	Mankato
561xx	Windom
562xx	Willmar
563xx	St. Cloud
564xx	Brainerd
565xx	Detroit Lakes
566xx	Bemidji
567xx	Thief River Falls

Minnesota resident average includes only patients submitted with a Minnesota ZIP code as their place of residence.

▲   Significantly higher than Minnesota resident average (based on 95% confidence interval)

▼   Significantly lower than Minnesota resident average (based on 95% confidence interval)

RATE VARIATION BY THREE-DIGIT ZIP CODE
Optimal Asthma Control - Children
2021 measurement year

567xx
15.7% ▼

566xx
45.8% ▼

556xx
33.3% ▼

557xx
49.7% ▼

565xx
50.3% ▼

558xx
49.8% ▼

564xx
48.5% ▼

563xx
50.7% ▼

550xx
60.7% ▲

551xx
61.2% ▲

562xx
35.1% ▼

553xx
63.3% ▲

554xx
58.8% ▲

561xx
21.5% ▼

560xx
52.5% ▼

559xx
60.8% ▲

57.3%
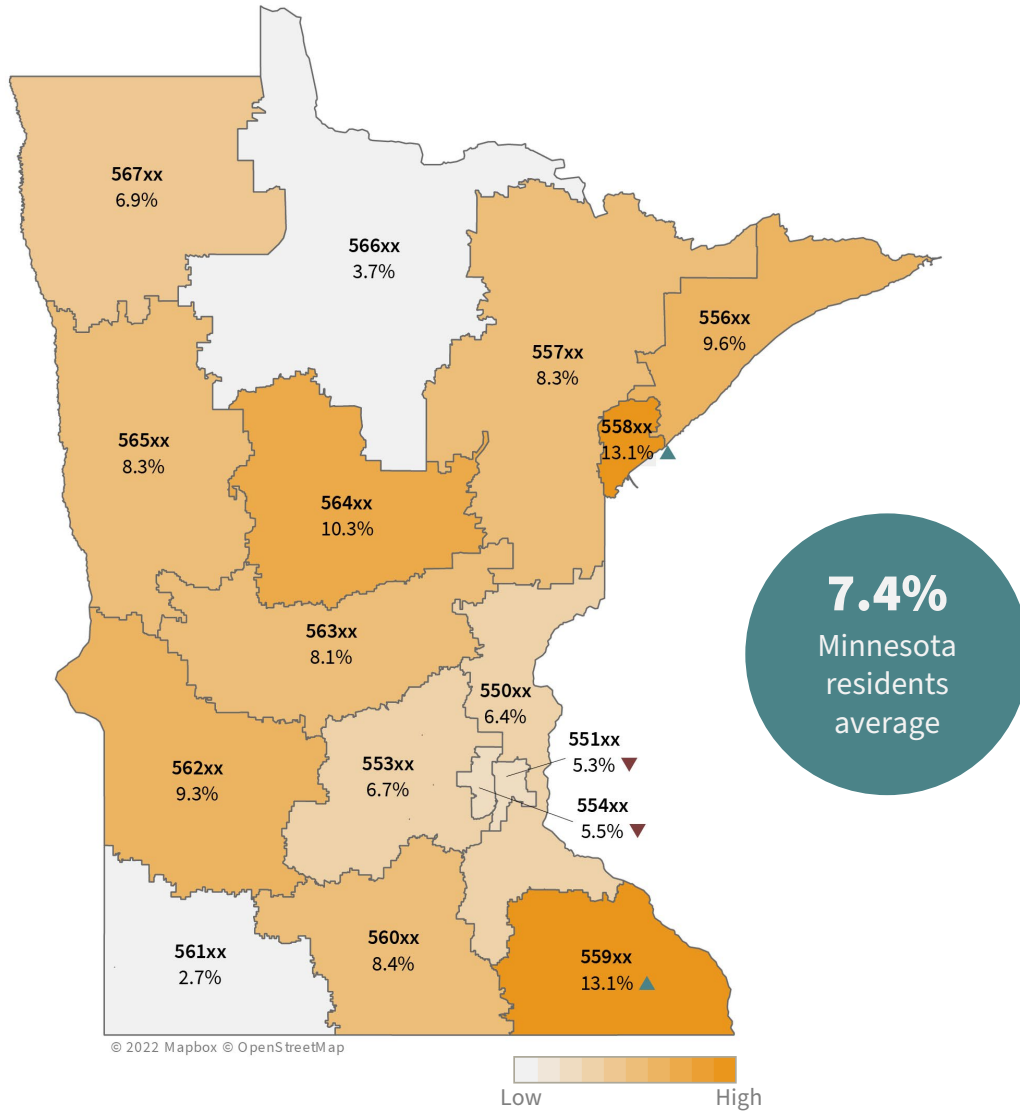Minnesota residents average

© 2022 Mapbox © OpenStreetMap

Low — High

Minnesota resident average includes only patients submitted with a Minnesota ZIP code as their place of residence.

▲ Significantly higher than Minnesota resident average (based on 95% confidence interval)

▼ Significantly lower than Minnesota resident average (based on 95% confidence interval)

The rate of Optimal Asthma Control among children was lowest in the 567xx region and highest in the 553xx region.

11 regions had optimal control rates that were significantly below the Minnesota resident average, while five regions had optimal control rates that were significantly above.

Three-digit ZIP Code	Major City
550xx	Stillwater
551xx	St. Paul
553xx	Minnetonka
554xx	Minneapolis
556xx	Two Harbors
557xx	Cloquet
558xx	Duluth
559xx	Rochester
560xx	Mankato
561xx	Windom
562xx	Willmar
563xx	St. Cloud
564xx	Brainerd
565xx	Detroit Lakes
566xx	Bemidji
567xx	Thief River Falls

RATE VARIATION BY THREE-DIGIT ZIP CODE

Adolescent Depression: Remission at Six Months

2021 measurement year

Two regions had rates of Remission at Six Months for adolescents that were significantly below the Minnesota resident average, while two regions had remission rates that were significantly above.

Three-digit ZIP Code	Major City
550xx	Stillwater
551xx	St. Paul
553xx	Minnetonka
554xx	Minneapolis
556xx	Two Harbors
557xx	Cloquet
558xx	Duluth
559xx	Rochester
560xx	Mankato
561xx	Windom
562xx	Willmar
563xx	St. Cloud
564xx	Brainerd
565xx	Detroit Lakes
566xx	Bemidji
567xx	Thief River Falls

Map of Minnesota showing rate variation by three-digit ZIP code:

- 567xx: 6.9%
- 566xx: 3.7%
- 556xx: 9.6%
- 557xx: 8.3%
- 565xx: 8.3%
- 558xx: 13.1% ▲
- 564xx: 10.3%
- 563xx: 8.1%
- 550xx: 6.4%
- 551xx: 5.3% ▼
- 554xx: 5.5% ▼
- 562xx: 9.3%
- 553xx: 6.7%
- 561xx: 2.7%
- 560xx: 8.4%
- 559xx: 13.1% ▲

7.4% Minnesota residents average

© 2022 Mapbox © OpenStreetMap

Low — High

Minnesota resident average includes only patients submitted with a Minnesota ZIP code as their place of residence.

▲ Significantly higher than Minnesota resident average (based on 95% confidence interval)

▼ Significantly lower than Minnesota resident average (based on 95% confidence interval)

SUMMARY OF RATE VARIATION BY THREE-DIGIT ZIP CODE
Children & Adolescents
2021 measurement year

Three-digit ZIP Code	Major City	Adolescent Mental Health Screening	Optimal Asthma Control	Depression: Remission at Six Months	# of Measures Above Average	# of Measures Below Average
Minnesota Resident Average		92.1%	57.3%	7.4%		
550xx	Stillwater	93.5% ▲	60.7% ▲	6.4%	2	0
551xx	St. Paul	92.1%	61.2% ▲	5.3% ▼	1	1
553xx	Minnetonka	93.8% ▲	63.3% ▲	6.7%	2	0
554xx	Minneapolis	91.8%	58.8% ▲	5.5% ▼	1	1
556xx	Two Harbors	89.4%	33.3% ▼	9.6%	0	1
557xx	Cloquet	91.4%	49.7% ▼	8.3%	0	1
558xx	Duluth	92.9%	49.8% ▼	13.1% ▲	1	1
559xx	Rochester	95.1% ▲	60.8% ▲	13.1% ▲	3	0
560xx	Mankato	92.0%	52.5% ▼	8.4%	0	1
561xx	Windom	66.3% ▼	21.5% ▼	2.7%	0	2
562xx	Willmar	88.0% ▼	35.1% ▼	9.3%	0	2
563xx	St. Cloud	91.6%	50.7% ▼	8.1%	0	1
564xx	Brainerd	95.7% ▲	48.5% ▼	10.3%	1	1
565xx	Detroit Lakes	90.2% ▼	50.3% ▼	8.3%	0	2
566xx	Bemidji	85.3% ▼	45.8% ▼	3.7%	0	2
567xx	Thief River Falls	70.2% ▼	15.7% ▼	6.9%	0	2

Minnesota resident average includes only patients submitted with a Minnesota ZIP code as their place of residence.

▲ Significantly higher than Minnesota resident average (based on 95% confidence interval)

▼ Significantly lower than Minnesota resident average (based on 95% confidence interval)

DEFINITIONS & METHODOLOGY

DEFINITIONS

GENERAL DEFINITIONS

Established patient criteria: Several measures use an established patient criteria, which requires that the patient have at least one established patient office or telehealth visit during the measurement period in order to be included in the measure. Measures that utilize this criteria include Optimal Asthma Control; Optimal Diabetes Care; and Optimal Vascular Care.

Measurement year: The time period being assessed and the year in which care was delivered.

MEASURE DEFINITIONS

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* underlined-excluded *from this measure.*

Colorectal Cancer Screening: The percentage of adults ages 50-75 who are up-to-date with the appropriate screening for colorectal cancer. Appropriate screenings include one of the following:
- Colonoscopy during the measurement period or the nine years prior; **OR**
- Flexible sigmoidoscopy during the measurement year or the four years prior; **OR**
- CT colonography during the measurement year or the four years prior; **OR**
- Fecal immunochemical test (FIT)-DNA during the measurement year or the two years prior; **OR**
- Guaiac-based fecal occult blood test (gFOBT) or FIT during the measurement year

Depression Measures (Adults & Adolescents)
- **PHQ-9/9M Utilization:** The percentage of adults (18 years of age and older) and adolescents (12-17 years of age) with a diagnosis of Major Depression or Dysthymia who also have a completed PHQ-9/9M tool during the measurement period.

- **Follow-up PHQ-9/9M at 6/12 Months:** The percentage of adults (18 years of age and older) and adolescents (12-17 years of age) with depression who have a completed PHQ-9/9M tool within six or 12 months after the index event (+/- 60 days).

- **Response at 6/12 Months:** The percentage of adults (18 years of age and older) and adolescents (12-17 years of age) with depression who demonstrated a response to treatment (at least 50 percent improvement) six or 12 months after the index event (+/- 60 days).

- **Remission at 6/12 Months:** The percentage of adults (18 years of age and older) and adolescents (12-17 years of age) with depression who reached remission (PHQ-9/9M score less than five) six months after the index event (+/- 60 days).

Click here for more information about how the index event is defined.

DEFINITIONS

MEASURE DEFINITIONS CONTINUED

Optimal Asthma Control (Adults & Children): The percentage of adults (18-50 years of age) and children (5-17 years of age) who had a diagnosis of asthma and whose asthma was optimally controlled during the measurement period as defined by achieving both of the following:

- Asthma well-controlled as defined by the most recent asthma control tool result available during the measurement period
- Patient not at elevated risk of exacerbation as defined by less than two emergency department visits and/or hospitalizations due to asthma in the last 12 months

Optimal Diabetes Care: The percentage of patients 18-75 years of age who had a diagnosis of type 1 or type 2 diabetes and whose diabetes was optimally managed during the measurement period as defined by achieving all of the following:

- HbA1c less than 8.0 mg/dL
- Blood pressure less than 140/90 mm Hg
- On a statin medication, unless allowed contraindications or exceptions are present
- Non-tobacco user
- Patient with ischemic vascular disease on daily aspirin or anti-platelets, unless allowed contraindications or exceptions are present
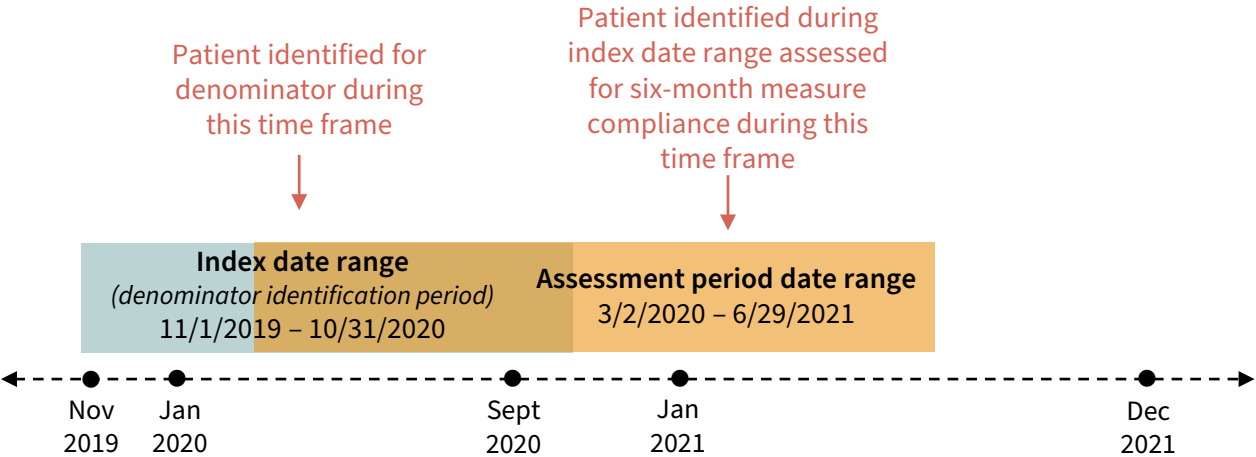
Optimal Vascular Care: The percentage of patients 18-75 years of age who had a diagnosis of ischemic vascular disease (IVD) and whose IVD was optimally managed during the measurement period as defined by achieving all of the following:

- Blood pressure less than 140/90 mm Hg
- On a statin medication, unless allowed contraindications or exceptions are present
- Non-tobacco user
- On daily aspirin or anti-platelets, unless allowed contraindications or exceptions are present
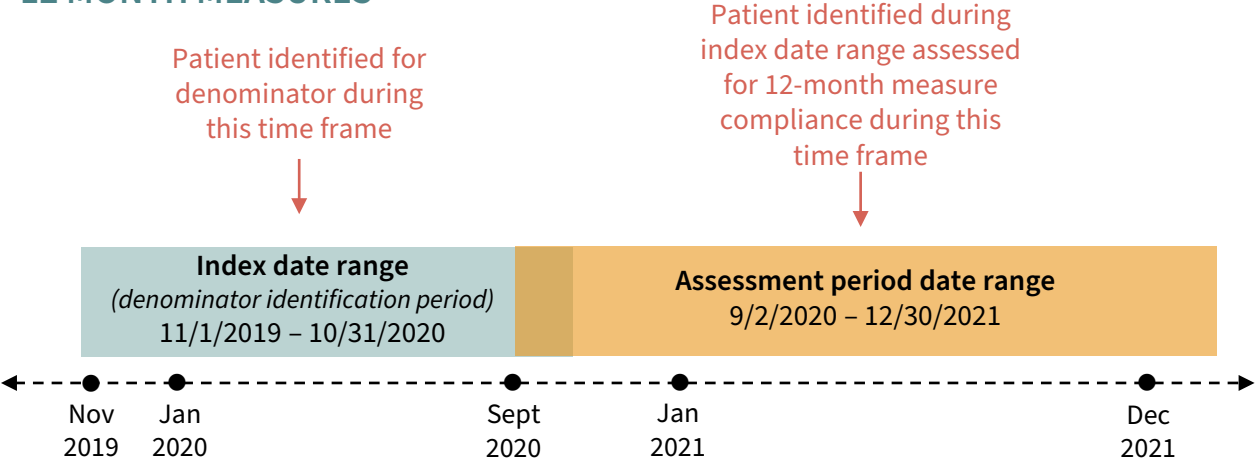
OVERVIEW OF DEPRESSION MEASURES

The depression measures are unique in that the time period for identifying eligible patients for the denominators does not follow the typical measurement period of a calendar year that the other quality measures do. The depression measures are longitudinal in design, meaning patients are followed through a period of time and assessed for the desired outcome. A patient is first identified for the denominator during the denominator identification period (shown below), which primarily occurs two years prior to when the data are submitted. The assessment period (shown below) is the time in which those patients identified in the denominator identification period are assessed for the desired outcome and primarily occurs in the year prior to data submission.

SIX MONTH MEASURES

Patient identified for denominator during this time frame

Patient identified during index date range assessed for six-month measure compliance during this time frame

Index date range
(denominator identification period)
11/1/2019 – 10/31/2020

Assessment period date range
3/2/2020 – 6/29/2021

Nov 2019 | Jan 2020 | Sept 2020 | Jan 2021 | Dec 2021

12 MONTH MEASURES

Patient identified for denominator during this time frame

Patient identified during index date range assessed for 12-month measure compliance during this time frame

Index date range
(denominator identification period)
11/1/2019 – 10/31/2020

Assessment period date range
9/2/2020 – 12/30/2021

Nov 2019 | Jan 2020 | Sept 2020 | Jan 2021 | Dec 2021

SUMMARY OF MEASURE TYPES

QUALITY MEASURE		PROCESS	OUTCOME	PRO-PM	COMPOSITE
PREVENTIVE HEALTH & CHRONIC CONDITIONS	Adolescent Mental Health and/or Depression Screening	●			
	Colorectal Cancer Screening	●			
	Optimal Asthma Control (Adults & Children)		●	●	●
	Optimal Diabetes Care		●		●
	Optimal Vascular Care		●		●
DEPRESSION CARE	PHQ-9 Utilization	●			
	Follow-up PHQ-9/9M at 6/12 Months	●			
	Response at 6/12 Months		●	●	
	Remission at 6/12Months		●	●	

Composite measures: A measure of two or more component measures, each of which individually reflects quality of care, combined into a single performance measure with a single score. The individual components are treated equally (not weighted). Every component must meet criteria to be counted in the numerator for the overall composite measure.

Outcome measures: These measures reflect the actual results of care. They are generally the most relevant measures for patients and the measures that providers most want to change.

Patient-reported outcome measures (PROM): A validated survey instrument or tool used to collect information directly from a patient.

Patient-reported outcome performance measures (PRO-PM): The measure built from a PROM.

Process measures: A measure that shows whether steps proven to benefit patients are being used. They measure whether an action was completed (e.g., having a medical exam or test, writing a prescription or administering a drug).

METHODS

The measures in this report are collected from medical groups that submit data directly to MN Community Measurement. These clinical quality measures enable reporting of results by clinic location as well as by medical group. Following the Methods section is a table that shows the number of patients included in each measure from 2019 to 2021.

DATA COLLECTION
MNCM is in the midst of transitioning its data collection for the clinical quality measures reported by medical groups to a modernized system known as PIPE that reduce quality measurement burden on health care providers and enables more timely feedback on performance. The previous data collection system, known as Direct Data Submission or DDS, required providers to separately identify the relevant population for each measure. The new PIPE system identifies the numerators, denominators, and performance rates for each measure centrally. About 28 percent of the data reported to MNCM for the clinical quality measures for Measurement Year 2021 was submitted via PIPE, and the transition to the new system is expected to be complete by the end of 2023.

CONFIDENCE INTERVALS
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.

MEDICAL GROUP AND CLINIC LEVEL RESULTS
Medical group and clinic level results and ratings for the 2021 measurement year can be found via MNCM's Dynamic Tables, which can be accessed here.

THRESHOLD FOR PUBLIC REPORTING
MNCM has established minimum thresholds for public reporting of clinical quality measures reported by medical groups to ensure statistically reliable rates. Only medical groups and clinics that meet the threshold of 30 patients in the denominator of a measure are publicly reported.

METHODS CONTINUED

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. It is especially important for outcome measures that are influenced by factors outside of the control of health care providers. MNCM uses an "Actual to Expected" methodology for risk adjustment. This methodology does not alter a clinic/medical group's result as 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 clinical quality measures reported by medical groups are calculated using a logistic regression model including the following variables:

Measure	Risk Adjustment Variables
Colorectal Cancer Screening	Insurance product, deprivation index, patient age
Optimal Asthma Control	Insurance product, deprivation index
Optimal Diabetes Care	Insurance product, deprivation index, patient age, diabetes type
Optimal Vascular Care	Insurance product, deprivation index, patient age
Depression Care Suite	Insurance product, deprivation index, patient age, depression severity

Insurance product type includes commercial, Medicare, Medicaid, uninsured, unknown.

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 Chi-square 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.

Measures that are not risk adjusted include: Adolescent Mental Health and/or Depression Screening and the PHQ-9/9M Utilization measures. This is because these are process measures that are not generally influenced by factors outside of a health care provider's control.

NUMBER OF PATIENTS INCLUDED IN QUALITY MEASURES BY MEASUREMENT YEAR (MY)

QUALITY MEASURE	Age Range	2019 MY	2020 MY	2021 MY
Adolescent Mental Health and/or Depression Screening	12-17	166,311	132,070	166,104
Colorectal Cancer Screening	50-75	1,419,934*	1,308,314*	1,363,905*
Adolescent Depression Measure Suite	12-17	11,658	13,559	12,501
Adolescent PHQ-9/9M Utilization	12-17	19,574	21,011	19,672
Adult Depression Measure Suite	18+	120,344	126,114	103,024
Adult PHQ-9/9M Utilization	18+	248,162	244,114	206,588
Optimal Asthma Control – Adults	18-50	142,612*	141,659	146,176
Optimal Asthma Control – Children	5-17	70,905*	59,661	61,049
Optimal Diabetes Care	18-75	321,962*	314,316	331,212
Optimal Vascular Care	18-75	189,299	178,460	186,878

The measures in this report are collected from clinics and enables reporting by clinic location and medical group

This table shows the number of patients included in each measure by measurement year.

Some measures allow for medical groups to submit a sample of their eligible population. The numbers provided in the table represent the actual number of patients submitted for the measure. Denominators that include samples are denoted with an asterisk (*).

NOTE: The COVID-19 pandemic affected many aspects of health care, including care delivery and access. Since the measures apply to those who accessed care, fewer people were included in the measure denominators in 2020 as a result.