

Chartbook Section 9

MINNESOTA STATEWIDE QUALITY REPORTING AND MEASUREMENT SYSTEM

Contents

Chartbook Section 9	1
Chartbook Section 9 Background	4
Adolescent Mental Health and/or Depression Screening	5
Statewide Rate	6
Patient Counts	7
Patient Population by Health Insurance Type, Race/Ethnicity, and Gender	8
Screening Rates by Health Insurance Type	. 11
Unscreened Rates by Race/Ethnicity	. 12
Screening by Gender	. 14
Colorectal Cancer Screening	. 15
Statewide Rate	. 16
Patient Counts	. 17
Patient Population by Health Insurance Type, Race/Ethnicity, and Gender	. 18
Screening Rates by Health Insurance Type	. 21
Unscreened Rates by Race/Ethnicity	. 22
Screening by Gender	
Depression Remission at Six Months	. 25

Statewide Rate	
Patient Counts	27
Patient Population by Age	
Remission Rates by Age	
Optimal Asthma Control and Asthma Education and Self-Management	
Statewide Rate: Pediatric Optimal Asthma Control	
Statewide Rate: Pediatric Asthma Education and Self-Management	
Statewide Rate: Adult Optimal Asthma Control	
Statewide Rate: Adult Asthma Education and Self-Management	
Asthma Components over Time: Pediatric Patients	
Asthma Components over Time: Adult Patients	
Patient Counts: Pediatric Optimal Asthma Control	
Patient Counts: Pediatric Asthma Education and Self-Management	
Patient Counts: Adult Optimal Asthma Control	
Patient Counts: Adult Asthma Education and Self-Management	
Patient Population by Health Insurance Type, Race/Ethnicity, and Gender: All Ages	
Component Rates by Health Insurance Type, All Ages	
Non-Optimal Care Rates by Race/Ethnicity, All Ages	
Optimal Care Rates by Gender, All Ages	
Optimal Diabetes Care	51
Statewide Rate	
Patient Counts	

Patient Population by Health Insurance Type, Race/Ethnicity, and Gender	54
Optimal Care Rates by Health Insurance Type	57
Non-Optimal Care Rates by Race/Ethnicity	58
Optimal Care by Gender	60
Optimal Vascular Care	61
Statewide Rate	62
Patient Counts	63
Patient Population by Health Insurance Type, Race/Ethnicity, and Gender	64
Optimal Care by Health Insurance Type	67
Non-Optimal Care Rates by Race/Ethnicity	68
Optimal Care by Gender	
Resources	71
Additional Information from the Health Economics Program	
Quality Measurement Resources	71

Background

Minnesota's Health Reform Law, enacted in 2008, requires the Commissioner of Health to establish a standardized set of quality measures for health care providers across the state. This set of measures is known as the Minnesota Statewide Quality Reporting and Measurement System (SQRMS). MDH updates the measure set every year, after seeking public comments and recommendations from the community. Physician clinics and hospitals are required to report quality measures annually. Statewide data collection began in 2010. At this point, more than 1,500 clinics participate in SQRMS.

The following charts are part of Minnesota's Health Care Markets Chartbook, an annual review of key metrics in health care access, coverage, market competition, and health care costs (<u>MN Statutes, Section 144.70</u>). The data in this chartbook are based on Minnesota resident patients seen at physician clinics in Minnesota in calendar years 2018 and 2019. Data on patients who received care outside the state, or through Veterans Affairs or Indian Health Services, are not included. For the first time, this chartbook includes some data on health care quality across genders and racial and ethnic groups. This demographic information is self-reported by patients. Each measure includes some charts that present the patient population breakdown according to the available demographics, followed by charts that present the optimal care or screening rate by demographic groups.

Certain demographic groups, particularly American Indian or Alaska Native patients, Hispanic or Latino patients, Black patients, uninsured patients, and patients with Minnesota Health Care Programs (MHCP) insurance coverage, often had optimal care rates that were notably lower than other groups. For most measures, the optimal care rates for all groups fell well below 100 percent. This was particularly true for measures based on chronic diseases like Optimal Diabetes Care, Optimal Vascular Care, and Optimal Asthma Care. Statewide optimal care rates for these measures have not substantially improved for years. Rates for some quality measures have improved: the rate of Depression Remission at Six Months increased from eight percent in 2018 to 10 percent in 2019, and both Colorectal Cancer Screening and Adolescent Mental Health and/or Depression Screening have improved modestly overall and within many demographic groups.

Adolescent Mental Health and/or Depression Screening

The percentage of patients ages 12 through 17 who were screened for mental health and/or depression.

Patients may be screened using any of the following tools:

- Beck Depression Inventory II (BDI-II)
- Beck Depression Inventory Fast Screen (BDI-FS)
- Child Depression Inventory (CDI)
- Child Depression Inventory II (CDI-2)
- Global Appraisal of Individual Needs screens for mental health and substance abuse (GAIN-SS)
- Kutcher Depression Scale (KADS)
- Patient Health Questionnaire 2 item version (PHQ-2)
- Patient Health Questionnaire 9 item version (PHQ-9); PHQ-9M Modified for Teens and Adolescents
- Pediatric Symptom Checklist 17 item version (PSC-17) parent version
- Pediatric Symptom Checklist 35 item (PSC-35) parent version
- Pediatric Symptom Checklist 35 item Youth Self-Report (PSC Y-SR)

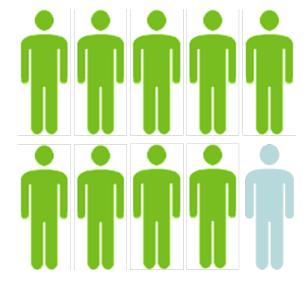
For simplicity, this measure is referred to as Adolescent Mental Health Screening in the following charts and tables.

Measure steward: MN Community Measurement

Statewide Rate

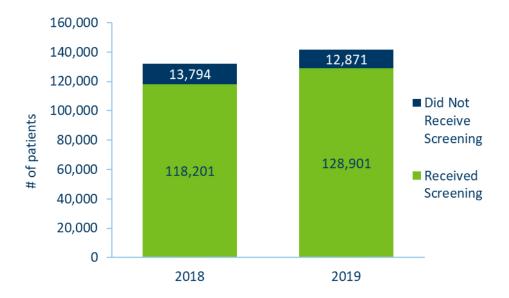
- Nine of every 10 eligible adolescents were screened for mental health and/or depression. This number was the same in 2018 and 2019.
- The statewide optimal care rate was 90 percent in 2018 and 91 percent in 2019.

Adolescent Mental Health Screening Statewide Rate in 2018 and 2019



Patient Counts

• From 2018 to 2019, the total number of Adolescent Mental Health Screening patients increased by 9,777.



Adolescent Mental Health Screening: Patient Counts

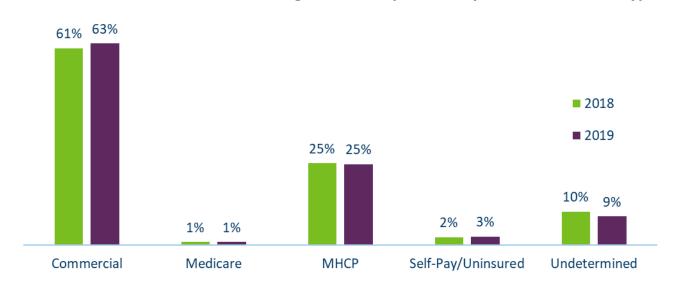
Table of Adolescent Mental Health Screening: Patient Counts

Outcome	2018	2019
Did Not Receive Screening	13,794	12,871
Received Screening	118,201	128,901
Optimal Care Rate	90%	91%

Note: There were 573 reporting clinics in 2018 and 560 in 2019.

Patient Population by Health Insurance Type, Race/Ethnicity, and Gender

- Commercial insurance was the most common coverage among adolescent mental health screening patients in 2018 and 2019, followed by Minnesota Health Care Programs (MHCP).
- About six-and-a-half out of every 10 patients identified as White.
- Fifty-two percent of patients were male.

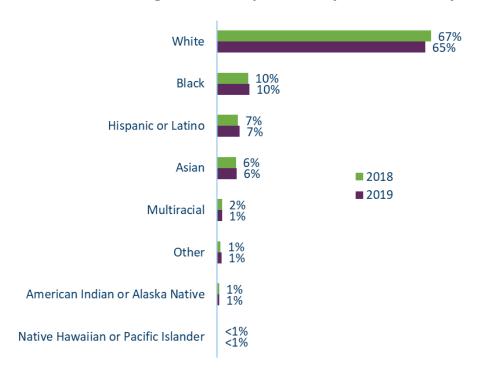


Adolescent Mental Health Screening: Patient Population by Health Insurance Type

Table of Adolescent Mental Health Screening: Patient Population by Health Insurance Type

Measure Population	Commercial	Medicare	МНСР	Self-Pay/Uninsured	Undetermined
Adolescent Mental Health Screening, 2018	61%	1%	25%	2%	10%
Adolescent Mental Health Screening, 2019	63%	1%	25%	3%	9%

Note: MHCP is Minnesota Health Care Programs, which includes Medical Assistance, MinnesotaCare, and the Minnesota Family Planning Program. Source: MDH Health Economics Program analysis of Quality Reporting System data.

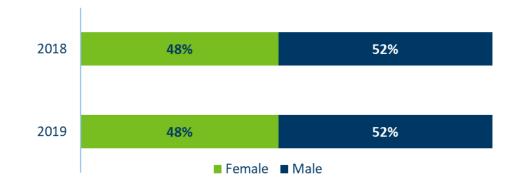


Adolescent Mental Health Screening: Patient Population by Race/Ethnicity, 2018 and 2019

Table of Adolescent Mental Health Screening: Patient Population by Race/Ethnicity

Measure Population	White		Hispanic or Latino Ethnicity	Asian	Multiracial			Native Hawaiian or Pacific Islander
Adolescent Mental Health Screening, 2018	67%	10%	7%	6%	2%	1%	1%	<1%
Adolescent Mental Health Screening, 2019	65%	10%	7%	6%	1%	1%	1%	<1%

Note: Percentages do not sum to 100 percent. Patients self-reported their race and ethnicity, and some declined to provide this information. Some patients' race and ethnicity data were unknown or not reportable because it was not collected according to best practices. Patients who identified their ethnicity as Hispanic or Latino also self-identified with one or more races. Patients who reported more than one race are included in the Multiracial category.



Adolescent Mental Health Screening: Patient Population by Gender, 2018 and 2019

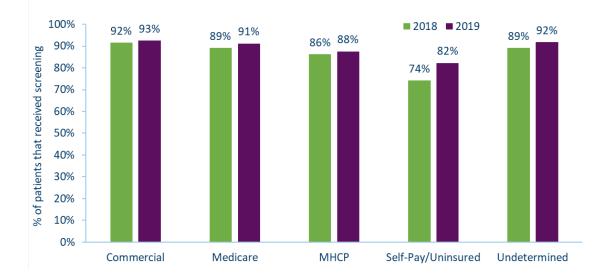
Table of Adolescent Mental Health Screening: Patient Population by Gender

Measure Population	Female	Male	Other Gender
Adolescent Mental Health Screening, 2018	48%	52%	<1%
Adolescent Mental Health Screening, 2019	48%	52%	<1%

Note: The Other Gender category may represent patients who do not identify with female or male genders, or patients whose gender has not been captured in the data. Other Gender patients were not included in bar charts due to very small numbers.

Screening Rates by Health Insurance Type

- Patients with commercial insurance had the highest Adolescent Mental Health Screening rate in 2018 and 2019 at 92 percent and 93 percent. Self-pay/uninsured patients had the lowest screening rates at 74 percent in 2018 and 82 percent in 2019.
- Screening rates for all groups increased between 2018 and 2019.



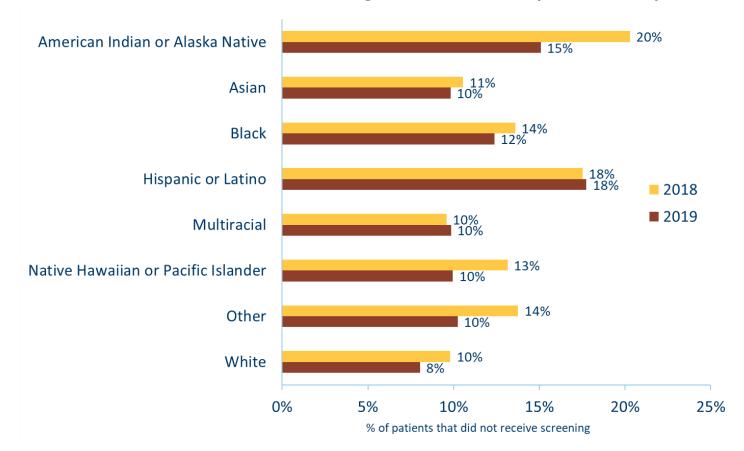
Adolescent Mental Health Screening: Screening Rates by Health Insurance Type

Table of Adolescent Mental Health Screening: Screening Rates by Health Insurance Type

Performance Year	erformance Year Commercial		МНСР	Self-Pay/Uninsured	Undetermined	
2018	92%	89%	86%	74%	89%	
2019	93%	91%	88%	82%	92%	

Unscreened Rates by Race/Ethnicity

- Screening rates for all race and ethnic groups fall short of 100 percent. This chart displays the proportion of patients in each group that were not screened for mental health problems and/or depression.
- American Indian or Alaska Native patients and Hispanic or Latino patients were the least likely to be screened in 2018 and 2019, with 15 to 20 percent of adolescents in these groups going unscreened.



Adolescent Mental Health Screening: Unscreened Rates by Race/Ethnicity

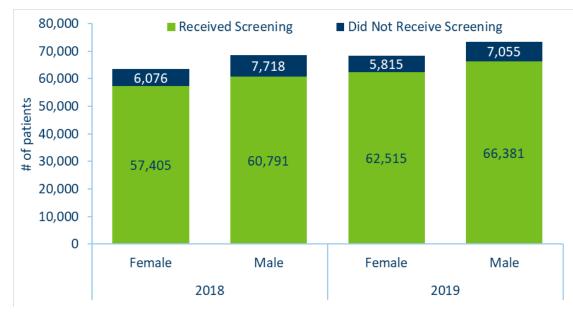
Measure Population	American Indian or Alaska Native	Asian	Black	Hispanic or Latino Ethnicity	Multiracial	Native Hawaiian or Pacific Islander	Other	White
Screening rates by race/ethnicity, 2018	80%	89%	86%	82%	90%	87%	86%	90%
Unscreened rates by race/ethnicity, 2018	20%	11%	14%	18%	10%	13%	14%	10%
Screening rates by race/ethnicity, 2019	85%	90%	88%	82%	90%	90%	90%	92%
Unscreened rates by race/ethnicity, 2019	15%	10%	12%	18%	10%	10%	10%	8%

Table of Adolescent Mental Health Screening: Rates by Race/Ethnicity

Note: Race/ethnic groups are displayed in alphabetical order. Percentages do not sum to 100 percent. Patients self-reported their race and ethnicity, and some declined to provide this information. Some patients' race and ethnicity data were unknown or not reportable because it was not collected according to best practices. Patients who identified their ethnicity as Hispanic or Latino also self-identified with one or more races. Patients who reported more than one race are included in the Multiracial category.

Screening by Gender

- Female patients had slightly higher screening rates compared to male patients in 2018 and 2019.
- Screening rates for both female and male patients increased slightly from 2018 to 2019.



Adolescent Mental Health Screening: Patients by Gender

Table of Adolescent Mental Health Screening: Patients by Gender

Gender		Did Not Receive Screening, 2018		Did Not Receive Screening, 2019		Screening Rate, 2019
Female	57,405	6,076	62,515	5,815	90%	91%
Male	60,791	7,718	66,381	7,055	89%	90%

Note: The Other Gender category may represent patients who do not identify with female or male genders, or patients whose gender has not been captured in the data. Other Gender patients were not included in bar charts or tables due to very small numbers: in 2018 there were five Other Gender patients; in 2019 there were six Other Gender patients.

Colorectal Cancer Screening

The percentage of patients ages 50 through 75 who are up to date with appropriate colorectal cancer screening exams. Appropriate screening exams include **ANY** of the following methods:

- 1. Colonoscopy within the measurement period or prior 9 years
- 2. Sigmoidoscopy or CT colonography within the measurement period or prior 4 years
- 3. FIT DNA test during the measurement period or prior two years
- 4. Stool blood test within the measurement period

Definitions:

Colonoscopy: An exam used to detect changes or abnormalities in the large intestine (colon) and rectum.

Sigmoidoscopy: An exam used to evaluate the lower part of the large intestine (colon).

CT colonography: An exam used to obtain a virtual interior view of the colon.

Stool blood test: A lab test used to check stool samples for hidden blood, which may be an indicator of colon cancer or polyps in the colon or rectum.

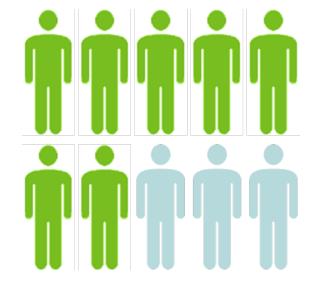
The USPSTF recommends regular colorectal cancer screening for adults ages 50-75 using the test described above.

Measure steward: MN Community Measurement

Statewide Rate

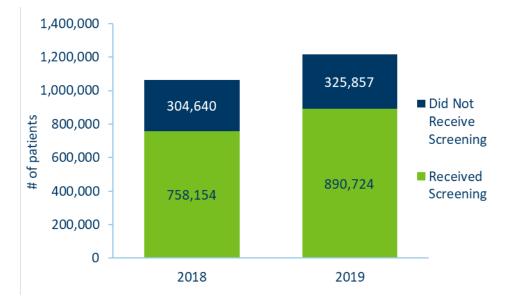
- Seven of every 10 eligible patients were screened for colorectal cancer. This number was the same in 2018 and 2019.
- The statewide optimal care rate was 71 percent in 2018 and 73 percent in 2019.

Colorectal Cancer Screening: Statewide Rate in 2018 and 2019



Patient Counts

- From 2018 to 2019, the total number of colorectal cancer screening patients increased by 153,787.
- The screening rate was 71 percent in 2018 and 73 percent in 2019.



Colorectal Cancer Screening: Patient Counts

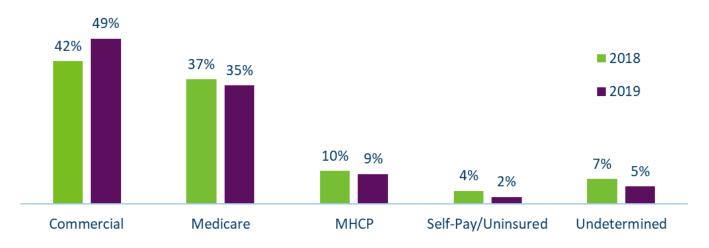
Table of Colorectal Cancer Screening: Patient Counts

Outcome	2018	2019
Did Not Receive Screening	304,640	325,857
Received Screening	758,154	890,724
Optimal Care Rate	71%	73%

Note: There were 629 reporting clinics in 2018 and 620 in 2019.

Patient Population by Health Insurance Type, Race/Ethnicity, and Gender

- Commercial insurance was the most common coverage among colorectal cancer screening patients in 2018 and 2019, followed by Medicare.
- Nine out of 10 patients identified as White.
- Over half of patients were female.

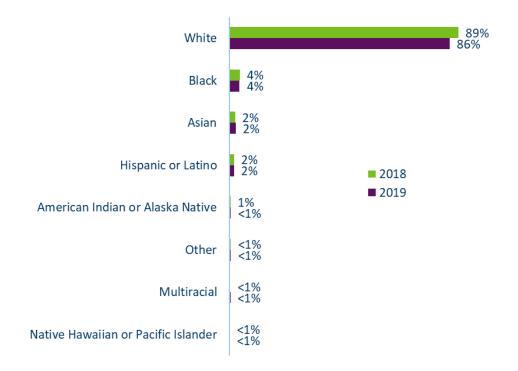


Colorectal Cancer Screening: Patient Population by Health Insurance Type

Table of Colorectal Cancer Screening: Patient Population by Health Insurance Type

Measure Population	Commercial	Medicare	МНСР	Self-Pay/Uninsured	Undetermined
Colorectal Cancer Screening, 2018	42%	37%	10%	4%	7%
Colorectal Cancer Screening, 2019	49%	35%	9%	2%	5%

Note: MHCP is Minnesota Health Care Programs, which includes Medical Assistance, MinnesotaCare, and the Minnesota Family Planning Program.



Colorectal Cancer Screening: Patient Population by Race/Ethnicity

Table of Colorectal Cancer Screening: Patient Population by Race/Ethnicity

Measure Population	White	Black		Latino	American Indian or Alaska Native	Other		Native Hawaiian or Pacific Islander
Colorectal Cancer Screening, 2018	89%	4%	2%	2%	1%	<1%	<1%	<1%
Colorectal Cancer Screening, 2019	86%	4%	2%	2%	<1%	<1%	<1%	<1%

Note: Percentages do not sum to 100 percent. Patients self-reported their race and ethnicity, and some declined to provide this information. Some patients' race and ethnicity data were unknown or not reportable because it was not collected according to best practices. Patients who identified their ethnicity as Hispanic or Latino also self-identified with one or more races. Patients who reported more than one race were included in the Multiracial category.

2018 55% 45% 2019 56% 44%

Colorectal Cancer Screening: Patient Population by Gender

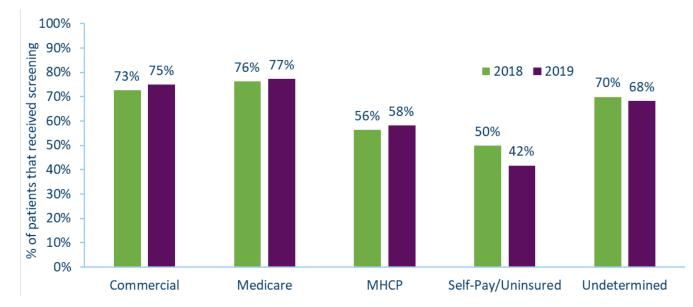
Table of Colorectal Cancer Screening: Patient Population by Gender

Measure Population	Female	Male	Other Gender
Colorectal Cancer Screening, 2018	55%	45%	<1%
Colorectal Cancer Screening, 2019	56%	44%	<1%

Note: The Other Gender category may represent patients who do not identify with female or male genders, or patients whose gender has not been captured in the data. Other Gender patients were not included in bar charts due to very small numbers.

Screening Rates by Health Insurance Type

- Patients with Medicare had the highest colorectal cancer screening rate in 2018 and 2019 at 76 percent and 77 percent, followed by patients with commercial insurance.
- Screening rates for commercial insurance, Medicare, and MHCP patients increased slightly between 2018 and 2019 while rates for selfpay/uninsured and undetermined insurance type patients decreased.



Colorectal Cancer Screening: Screening Rates by Health Insurance Type

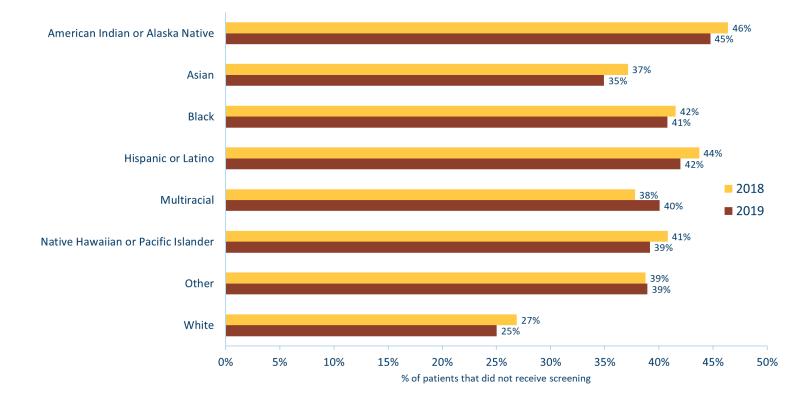
Table of Colorectal Cancer Screening: Screening Rates by Health Insurance Type

Performance Year	Commercial	Medicare	МНСР	Self-Pay/Uninsured	Undetermined	
2018	73%	76%	56%	50%	70%	
2019	75%	77%	58%	42%	68%	

Note: MHCP is Minnesota Health Care Programs, which includes Medical Assistance, MinnesotaCare, and the Minnesota Family Planning Program.

Unscreened Rates by Race/Ethnicity

- Screening rates for all race and ethnic groups fall short of 100 percent. This chart displays the proportion of patients in each group that were not screened for colorectal cancer.
- Screening rates improved between 2018 and 2019 for all racial and ethnic groups except Multiracial patients.
- Over 40 percent of American Indian or Alaska Native patients, Black patients, Hispanic or Latino patients, and Multiracial patients were unscreened in 2019.



Colorectal Cancer Screening: Unscreened Rates by Race/Ethnicity

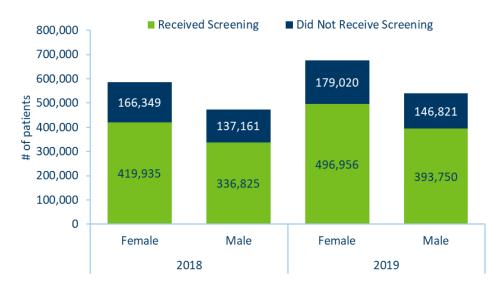
Rates	American Indian or Alaska Native	Asian	Black	Hispanic or Latino Ethnicity		Native Hawaiian or Pacific Islander	Other	White
Screening rates by race/ethnicity, 2018	54%	63%	58%	56%	62%	59%	61%	73%
Unscreened rates by race/ethnicity, 2018	46%	37%	42%	44%	38%	41%	39%	27%
Screening Rates by race/ethnicity, 2019	55%	65%	59%	58%	60%	61%	61%	75%
Unscreened rates by race/ethnicity, 2019	45%	35%	41%	42%	40%	39%	39%	25%

Table of Colorectal Cancer Screening: Rates by Race/Ethnicity

Note: Race/ethnic groups are displayed in alphabetical order. Percentages do not sum to 100 percent. Patients self-reported their race and ethnicity, and some declined to provide this information. Some patients' race and ethnicity data were unknown or not reportable because it was not collected according to best practices. Patients who identified their ethnicity as Hispanic or Latino also self-identified with one or more races. Patients who reported more than one race were included in the Multiracial category.

Screening by Gender

- Female patients had very slightly higher screening rates compared to male patients in 2018 and 2019.
- Screening rates for both male and female patients increased slightly from 2018 to 2019.



Colorectal Cancer Screening: Patients by Gender

Table of Colorectal Cancer Screening: Patients by Gender

	Received Screening, 2018	Did Not Receive Screening, 2018		Did Not Receive Screening, 2019	• ·	Screening Rate, 2019
Female	419,935	166,349	496,956	179,020	72%	74%
Male	336,825	137,161	393,750	146,821	71%	73%
Other Gender	1,394	1,130	18	16	55%	53%

Note: The Other Gender category may represent patients who do not identify with female or male genders, or patients whose gender has not been captured in the data. Other Gender patients were not included in bar charts due to small numbers.

Depression Remission at Six Months

The percentage of patients with Major Depression or Dysthymia who reached remission six months (+/- 30 days) after an initial visit.

To achieve remission, patients must score below 5 on the Patient Health Questionnaire-9 (PHQ-9) tool.

Patients are not counted as having reached remission if they do not complete a PHQ-9 six months (+/- 30 days) after their initial visit.

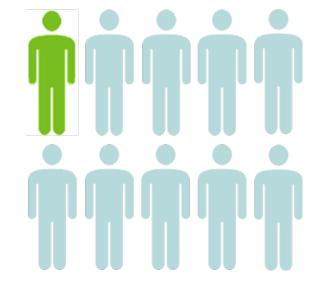
The following charts include patient population information and depression remission rates presented by age for the first time. In 2018, patients were stratified into three age groups: Ages 18 through 44, ages 45 through 64, and ages 65 and over. In 2019 an additional group was added for ages 12 through 17. Depression remission data by gender and race/ethnicity was not available for this chartbook.

Measure steward: MN Community Measurement National Quality Forum #0711

Statewide Rate

- One of every 10 eligible depression patients achieved remission in six months. This number was the same in 2018 and 2019.
- The statewide optimal care rate was eight percent in 2018 and 11 percent in 2019.

Depression Remission at Six Months: Statewide Rate in 2018 and 2019



Patient Counts

- From 2018 to 2019, the total number of depression patients increased by 25,467. The age range of patients included in the measure expanded to include patients ages 12 to 17.
- The screening rate increased from eight percent in 2018 to 11 percent in 2019.



Depression Remission at Six Months: Patient Counts

Table of Depression Remission at Six Months: Patient Counts

Outcome	2018	2019
Not in Remission at Six Months	83,970	103,995
In Remission at Six Months	7,137	12,579
Remission Rate	8%	11%

Note: There were 598 reporting clinics in 2018 and 635 in 2019.

Patient Population by Age

- Over half of patients were between ages 18 and 44.
- The new 12 to 17-year-old age category made up just under 10 percent of the depression patient population in 2019.

Depression Remission at Six Months: Patient Population by Age

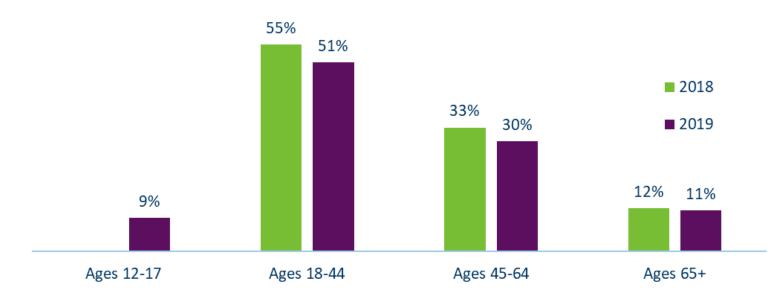
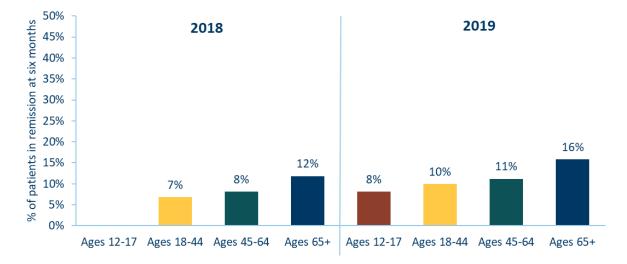


Table of Depression Remission at Six Months: Patient Population by Age

Year	Ages 12-17	Ages 18-44	Ages 45-64	Ages 65+
2018	Not included in measure	55%	33%	12%
2019	9%	51%	30%	11%

Remission Rates by Age

- Depression remission rates increased with patient age. In 2019, 16 percent of seniors were in remission at six months, compared to eight percent of adolescents.
- Remission rates for all age groups increased between 2018 and 2019.



Depression Remission at Six Months: Remission Rates by Age

Table of Depression Remission at Six Months: Remission Rates by Age

Patient Age Groups	In Remission, 2018	Not in Remission, 2018	In Remission, 2019			Remission Rate, 2019
Ages 12-17	Not included in measure	Not included in measure	842	9,567	NA	8%
Ages 18-44	3,451	46,917	5,861	53,090	7%	10%
Ages 45-64	2,438	27,762	3,844	30,553	8%	11%
Ages 65+	1,248	9,291	2,032	10,785	12%	16%

Optimal Asthma Control and Asthma Education and Self-Management

Optimal Asthma Control: The percentage of asthma patients, ages 5 through 17 or 18 through 50, who met the following two goals: 1) Asthma under control 2) Asthma at low risk of worsening.

Asthma Education & Self-Management: The percentage of asthma patients, ages 5 through 17 or 18 through 50, who have been educated about their condition and have a written asthma self-management plan.

Prior to 2014, Asthma Education & Self-Management was part of a composite Optimal Asthma Care measure that also included the control and risk components that now make up the Optimal Asthma Control measures. To provide context on the impact of removing the asthma education component from this composite measure, we present seven years of component data in the Asthma Components over Time charts.

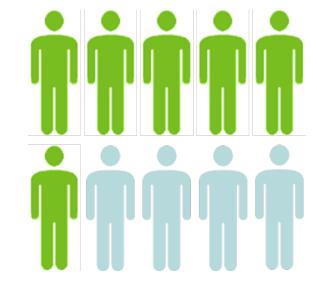
Asthma quality measurement is stratified by age: Ages 5 through 17 for children and ages 18 through 50 for adults. In the following charts some demographic data, including information on patient health insurance type, gender, and race/ethnicity, were not available for the separate child and adult patient populations. Charts based on these demographics combine asthma patients of all ages into one patient population.

Optimal Asthma Control measure steward: MN Community Measurement

Statewide Rate: Pediatric Optimal Asthma Control

- Six of every 10 eligible pediatric patients had optimal asthma control, their asthma was under control and at a low risk of worsening.
- This number was the same in 2018 and 2019.
- The pediatric statewide optimal care rate was 61 percent in 2018 and 59 percent in 2019.

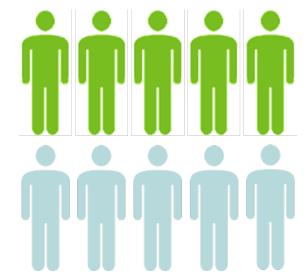
Pediatric Optimal Asthma Control: Statewide Rate in 2018 and 2019



Statewide Rate: Pediatric Asthma Education and Self-Management

- Five of every 10 eligible pediatric patients had asthma education and a self-management plan.
- This number was the same in 2018 and 2019.
- The statewide pediatric asthma education and self-management rate was 48 percent in 2018 and 47 percent in 2019.

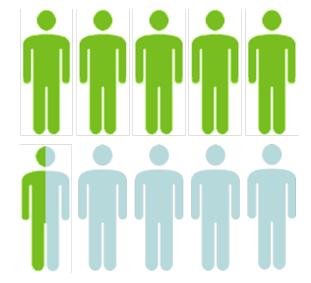
Pediatric Asthma Education and Self-Management: Statewide Rate in 2018 and 2019



Statewide Rate: Adult Optimal Asthma Control

- Five-and-a-half of every 10 eligible adult patients had optimal asthma control: Their asthma was under control and at a low risk of worsening.
- This number was the same in 2018 and 2019.
- The adult statewide optimal control rate was 54 percent in 2018 and 2019.

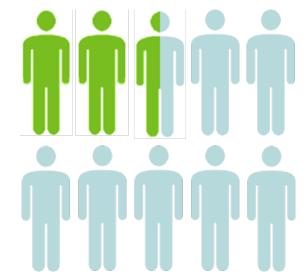
Adult Optimal Asthma Control: Statewide Rate in 2018 and 2019



Statewide Rate: Adult Asthma Education and Self-Management

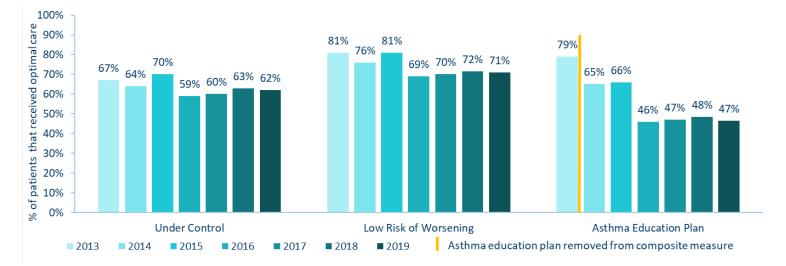
- Two-and-a-half of every 10 eligible adult patients had asthma education and a self-management plan.
- This number was the same in 2018 and 2019.
- The statewide optimal care rate was 26 percent in 2018 and 25 percent in 2019.

Adult Asthma Education and Self-Management: Statewide Rate in 2018 and 2019



Asthma Components over Time: Pediatric Patients

- The rate of patients receiving asthma education decreased after this component was removed from the composite measure in 2014.
- In 2016 the population included in the measure increased and all components dropped by over 10 percent compared to 2015.
- The rate of patients meeting individual component goals has remained relatively flat between 2016 and 2019.



Pediatric Asthma Components over Time

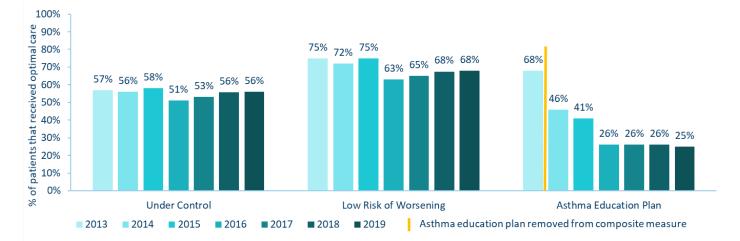
Table of Pediatric Asthma Component Rates over Time

Component	2013	2014	2015	2016	2017	2018	2019
Under Control	67%	64%	70%	59%	60%	63%	62%
Low Risk of Worsening	81%	76%	81%	69%	70%	72%	71%
Asthma Education Plan	79%	65%	66%	46%	47%	48%	47%

Note that established patient criteria changed in 2016 and the number of patients in the measure increased. To provide context on the impact of removing the education/selfmanagement component separation and changing the established patient criteria, we included seven years of data.

Asthma Components over Time: Adult Patients

- The rate of patients with an asthma education plan declined after this component was removed from the composite measure in 2014, settling into a low of about 25 percent, where it remained in 2019.
- In 2016 the patient population included in the measure increased and all component rates dropped compared to 2015.
- The risk and control component rates increased slightly from 2016 to 2018 and remained constant in 2019.



Adult Asthma Components over Time

Table of Adult Asthma Component Rates over Time

Component	2013	2014	2015	2016	2017	2018	2019
Under Control	57%	56%	58%	51%	53%	56%	56%
Low Risk of Worsening	75%	72%	75%	63%	65%	68%	68%
Asthma Education Plan	68%	46%	41%	26%	26%	26%	25%

Note: Established patient criteria changed in 2016 and the number of patients in the measure increased. To provide context on the impact of removing the education/self-management component separation and changing the established patient criteria, we have included five years of data.

Patient Counts: Pediatric Optimal Asthma Control

- From 2018 to 2019, the total number of pediatric asthma patients decreased by 1,235.
- The pediatric optimal asthma control rate was 61 percent in 2018 and 59 percent in 2019. This rate is based on patients whose asthma was both under control and at a low risk of worsening.



Pediatric Optimal Asthma Control: Patient Counts

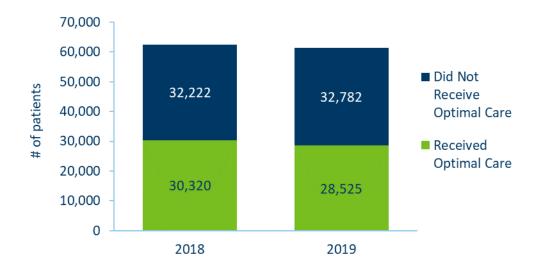
Table of Pediatric Optimal Asthma Control: Patient Counts

Outcome	2018	2019
Did Not Receive Optimal Care	24,696	25,263
Received Optimal Care	37,846	36,044
Optimal Care Rate	61%	59%

Note: There were 621 reporting clinics in 2018 and 606 in 2019.

Patient Counts: Pediatric Asthma Education and Self-Management

The rate of pediatric patients with asthma education and a self-management plan was 48 percent in 2018 and 47 percent in 2019.



Pediatric Asthma Education and Self-Management: Patient Counts

Table of Pediatric Asthma Education and Self-Management: Patient Counts

Outcome	2018	2019
Did Not Receive Optimal Care	32,222	32,782
Received Optimal Care	30,320	28,525
Optimal Care Rate	48%	47%

Note: There were 621 reporting clinics in 2018 and 606 in 2019.

Patient Counts: Adult Optimal Asthma Control

- From 2018 to 2019, the total number of adult asthma patients increased by 3,349.
- The adult optimal asthma control rate was 54 percent in 2018 and 2019. This rate is based on patients whose asthma was both under control and at a low risk of worsening.



Adult Optimal Asthma Control: Patient Counts

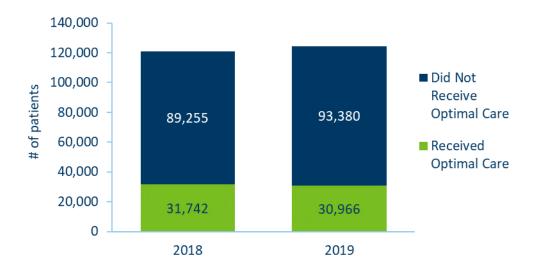
Table of Adult Optimal Asthma Control: Patient Counts

Outcome	2018	2019
Did Not Receive Screening	55,649	56,886
Received Screening	65,348	67,460
Optimal Care Rate	54%	54%

Note: There were 621 reporting clinics in 2018 and 606 in 2019.

Patient Counts: Adult Asthma Education and Self-Management

The adult asthma education and self-management rate was 26 percent in 2018 and 25 percent in 2019.



Adult Asthma Education and Self-Management: Patient Counts

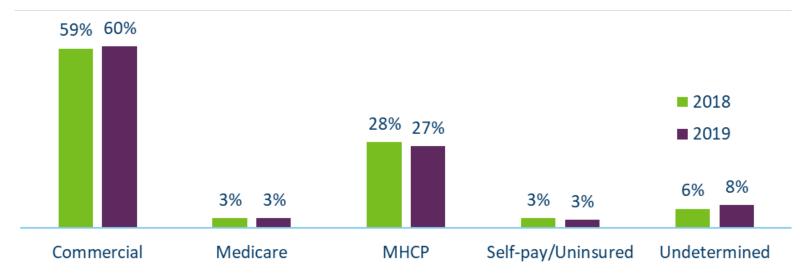
Table of Adult Asthma Education and Self-Management: Patient Counts

Outcome	2018	2019
Did Not Receive Screening	89,255	93,380
Received Screening	31,742	30,966
Optimal Care Rate	26%	25%

Note: There were 621 reporting clinics in 2018 and 606 in 2019.

Patient Population by Health Insurance Type, Race/Ethnicity, and Gender: All Ages

- Commercial insurance was the most common coverage among asthma patients in 2018 and 2019, followed by MHCP.
- Eight out of 10 patients identified as White.
- Over half of patients were female.

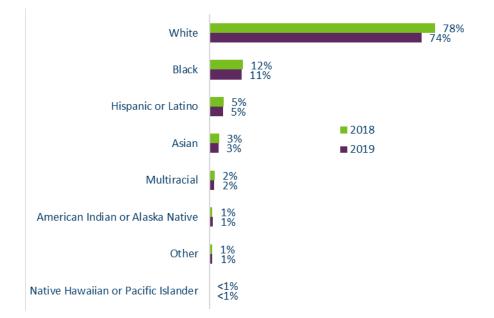


Asthma, All Ages: Patient Population by Health Insurance Type

Table of Asthma, All Ages: Patient Population by Health Insurance Type

Measure Population	Commercial	Medicare	МНСР	Self-Pay/Uninsured	Undetermined
Asthma, All Ages, 2018	59%	3%	28%	3%	6%
Asthma, All Ages, 2019	60%	3%	27%	3%	8%

Note: MHCP is Minnesota Health Care Programs, which includes Medical Assistance, MinnesotaCare, and the Minnesota Family Planning Program. Source: MDH Health Economics Program analysis of Quality Reporting System data.



Asthma, All Ages: Patient Population by Race/Ethnicity, 2018 and 2019

Table of Asthma, All Ages: Patient Population by Race/Ethnicity

Measure Population	White		Hispanic or Latino Ethnicity	Asian		American Indian or Alaska Native		Native Hawaiian or Pacific Islander
Asthma, All Ages, 2018	78%	12%	5%	3%	2%	1%	1%	<1%
Asthma, All Ages, 2019	74%	11%	5%	3%	2%	1%	1%	<1%

Note: Percentages do not sum to 100 percent. Patients self-reported their race and ethnicity, and some declined to provide this information. Some patients' race and ethnicity data were unknown or not reportable because it was not collected according to best practices. Patients who identified their ethnicity as Hispanic or Latino also self-identified with one or more races. Patients who reported more than one race were included in the Multiracial category.

Asthma, All Ages: Patient Population by Gender, 2018 and 2019



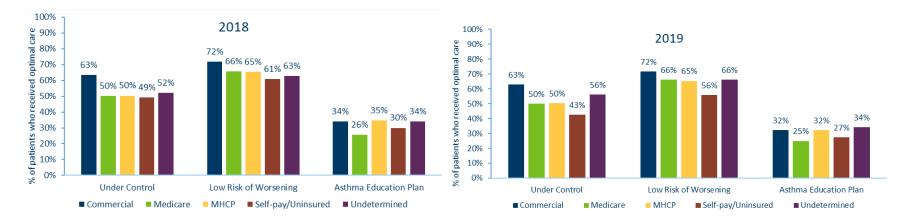
Table of Asthma, All Ages: Patient Population by Gender

Measure Population	Female	Male	Other Gender
Asthma, All Ages, 2018	59%	41%	<1%
Asthma, All Ages, 2019	59%	41%	<1%

Note: The Other Gender category may represent patients who do not identify with female or male genders, or patients whose gender has not been captured in the data. Other Gender patients were not included in bar charts due to very small numbers.

Component Rates by Health Insurance Type, All Ages

- Patients with commercial insurance had the highest rates for the control and risk components in both 2018 and 2019.
- Self-pay/uninsured patients had the lowest rates for the control and risk components in both years.



Asthma, All Ages: Optimal Care Rates by Health Insurance Type

Table of Asthma Components: Rates by Health Insurance Type, All Ages

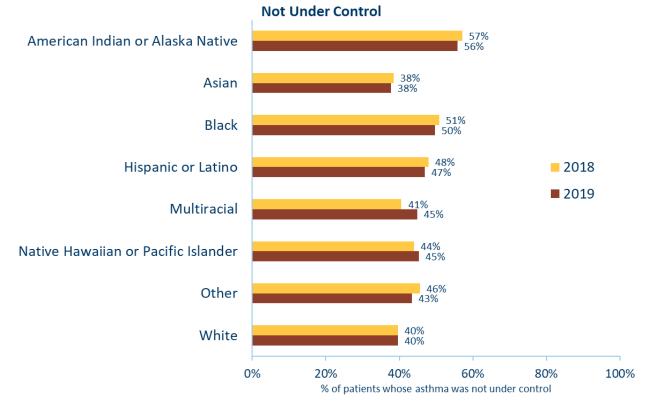
Year	Component	Commercial	Medicare	МНСР	Self-Pay/Uninsured	Undetermined
2018	Under Control	63%	50%	50%	49%	52%
2018	Low Risk of Worsening	72%	66%	65%	61%	63%
2018	Asthma Education Plan	34%	26%	35%	30%	34%
2019	Under Control	63%	50%	50%	43%	56%
2019	Low Risk of Worsening	72%	66%	65%	56%	66%
2019	Asthma Education Plan	32%	25%	32%	27%	34%

Note: MHCP is Minnesota Health Care Programs, which includes Medical Assistance, MinnesotaCare, and the Minnesota Family Planning Program.

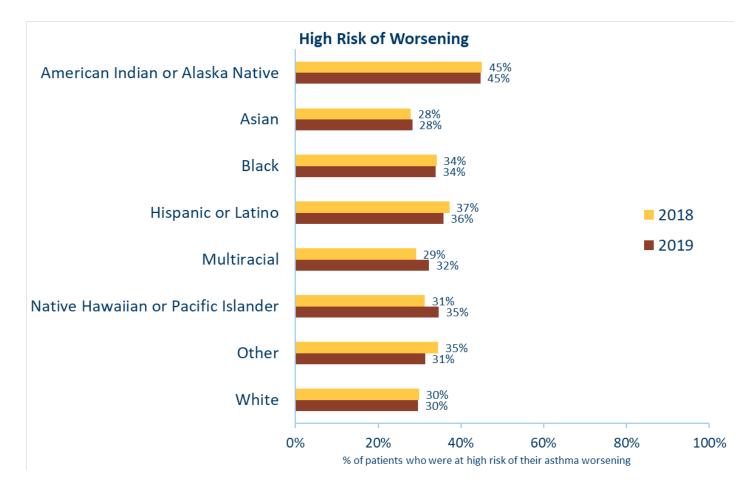
Non-Optimal Care Rates by Race/Ethnicity, All Ages

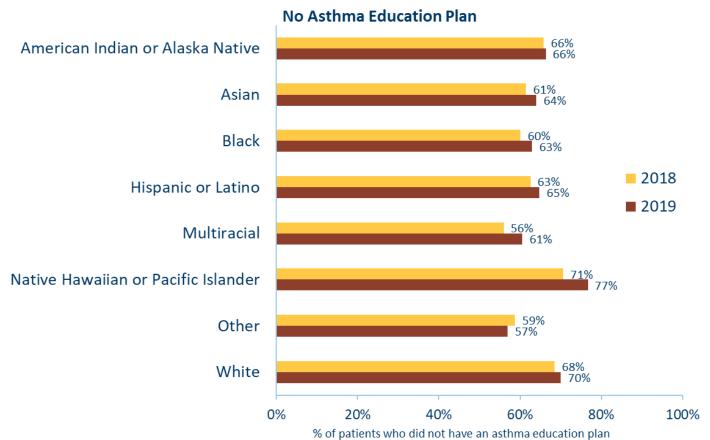
- Optimal care rates for all race and ethnic groups fall short of 100 percent. These charts display the proportion of patients in each group that did not receive optimal care.
- More than 50 percent of American Indian or Alaska Native patients had asthma that was not in control in 2018 and 2019. Asian and White patients had the highest rates of asthma control. Even in these groups, about 40 percent of patients did not have their asthma under control.
- The majority of patients in all race and ethnic groups did not have a current asthma education plan on file in 2018 or 2019.

Asthma, All Ages: Non-Optimal Care Rates by Race/Ethnicity



4 5





of patients who are not have an astrina cadeation pr

Year	Components	American Indian or Alaska Native	Asian	Black	Hispanic or Latino Ethnicity	Multiracial	Native Hawaiian or Pacific Islander	Other	White
2018	Under Control Rates	43%	62%	49%	52%	59%	56%	54%	60%
2018	Not Under Control Rates	57%	38%	51%	48%	41%	44%	46%	40%
2019	Under Control Rates	44%	62%	50%	53%	55%	55%	57%	60%
2019	Not Under Control Rates	56%	38%	50%	47%	45%	45%	43%	40%
2018	Low Risk of Worsening Rates	55%	72%	66%	63%	71%	69%	65%	70%
2018	High Risk of Worsening Rates	45%	28%	34%	37%	29%	31%	35%	30%
2019	Low Risk of Worsening Rates	55%	72%	66%	64%	68%	65%	69%	70%
2019	High Risk of Worsening Rates	45%	28%	34%	36%	32%	35%	31%	30%
2018	Asthma Education Plan Rates	34%	39%	40%	37%	44%	29%	41%	32%
2018	No Asthma Education Plan Rates	66%	61%	60%	63%	56%	71%	59%	68%
2019	Asthma Education Plan Rates	34%	36%	37%	35%	39%	23%	43%	30%
2019	No Asthma Education Plan Rates	66%	64%	63%	65%	61%	77%	57%	70%

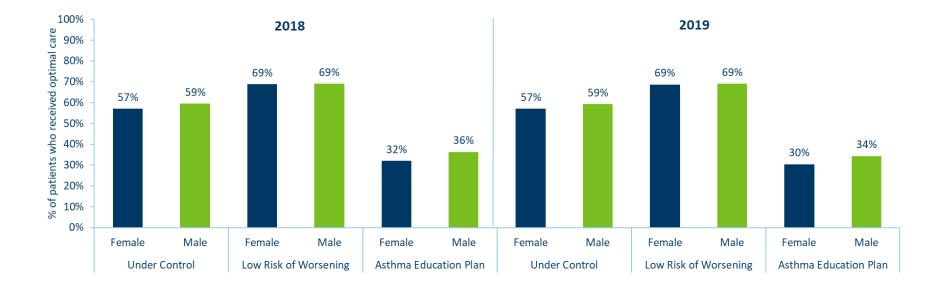
Table of Asthma Components: Rates by Race/Ethnicity, All Ages

Note: Race/ethnic groups are displayed in alphabetical order. Percentages do not sum to 100 percent. Patients self-reported their race and ethnicity, and some declined to provide this information. Some patients' race and ethnicity data were unknown or not reportable because it was not collected according to best practices. Patients who identified their ethnicity as Hispanic or Latino also self-identified with one or more races. Patients who reported more than one race were included in the Multiracial category.

Source: MDH Health Economics Program analysis of Quality Reporting System data. Summary of figures.

Optimal Care Rates by Gender, All Ages

- Male patients had slightly higher control and education rates in 2018 and 2019.
- Education rates decreased slightly for both genders in 2019, while control and risk component rates remained stable.



Year	Component	Gender	Optimal Care Rate	Received Optimal Care	Did Not Receive Optimal Care
2018	Under Control	Female	57%	61,395	46,070
2018	Under Control	Male	59%	45,253	30,803
2018	Under Control	Other Gender	33%	6	12
2018	Low Risk of Worsening	Female	69%	73,940	33,525
2018	Low Risk of Worsening	Male	69%	52,524	23,532
2018	Low Risk of Worsening	Other Gender	44%	8	10
2018	Asthma Education Plan	Female	32%	34,447	73,018
2018	Asthma Education Plan	Male	36%	27,610	48,446
2018	Asthma Education Plan	Other Gender	28%	5	13
2019	Under Control	Female	57%	62,499	46,904
2019	Under Control	Male	59%	45,217	31,018
2019	Under Control	Other Gender	73%	11	4
2019	Low Risk of Worsening	Female	69%	75,145	34,258
2019	Low Risk of Worsening	Male	69%	52,719	23,516
2019	Low Risk of Worsening	Other Gender	80%	12	3
2019	Asthma Education Plan	Female	30%	33,266	76,137
2019	Asthma Education Plan	Male	34%	26,215	50,020
2019	Asthma Education Plan	Other Gender	67%	10	5

Table of Asthma Components: Rates and Patients by Gender

Note: The Other Gender category may represent patients who do not identify with female or male genders, or patients whose gender has not been captured in the data. Other Gender patients were not included in bar charts due to small numbers.

Optimal Diabetes Care

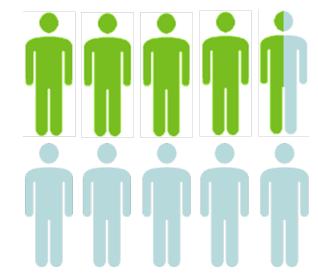
The percentage of diabetes patients, ages 18 through 75, who met ALL of the following five goals:

- 1) Blood sugar control
- 2) Blood pressure control
- 3) Statin use, if needed
- 4) Daily aspirin use, if needed
- 5) No tobacco use

Measure steward: MN Community Measurement National Quality Forum #0729

Statewide Rate

- Four-and-a-half of every 10 eligible patients received optimal diabetes care. This number was the same in 2018 and 2019.
- The statewide optimal care rate was 45% in 2018 and 2019.



Optimal Diabetes Care: Statewide Rate in 2018 and 2019

Patient Counts

- From 2018 to 2019, the total number of diabetes patients increased by 6,452.
- Over the same period, the optimal care rate remained constant at 45 percent.



Optimal Diabetes Care: Patient Counts

Table of Optimal Diabetes Care: Patient Counts

Outcome	2018	2019
Did Not Receive Optimal Care	147,462	149,657
Received Optimal Care	120,134	124,391
Optimal Care Rate	45%	45%

Note: There were 561 reporting clinics in 2018 and 2019.

Patient Population by Health Insurance Type, Race/Ethnicity, and Gender

- Among diabetes patients, about 40 percent had commercial insurance and 36 percent had Medicare.
- Eight out of 10 patients identified as White.
- Over half of patients were male.
- These proportions were the same in 2018 and 2019.

Optimal Diabetes Care: Patient Population by Health Insurance Type

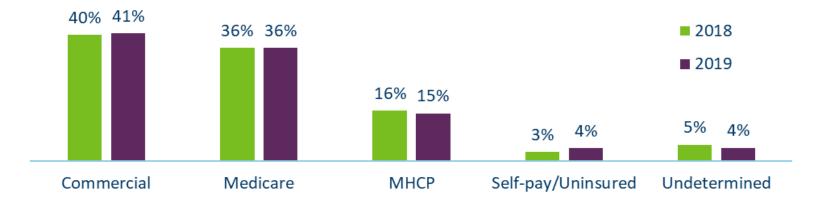
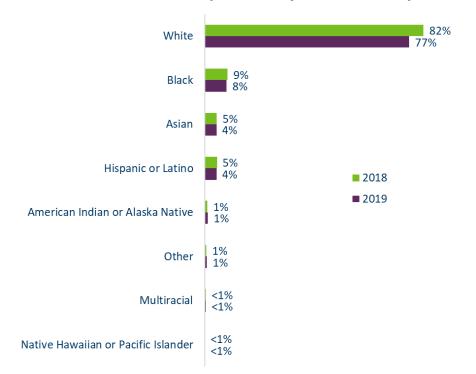


Table of Optimal Diabetes Care: Patient Population by Health Insurance Type

Year	Commercial	Medicare	МНСР	Self-Pay/Uninsured	Undetermined
2018	40%	36%	16%	3%	5%
2019	41%	36%	15%	4%	4%

Note: MHCP is Minnesota Health Care Programs, which includes Medical Assistance, MinnesotaCare, and the Minnesota Family Planning Program. Source: MDH Health Economics Program analysis of Quality Reporting System data.



Optimal Diabetes Care: Patient Population by Race/Ethnicity, 2018 and 2019

Table of Optimal Diabetes Care: Patient Population by Race/Ethnicity

Measure Population	White	Black		Indian or Alaska		Other		Native Hawaiian or Pacific Islander
Optimal Diabetes Care, 2018	82%	9%	5%	1%	5%	1%	<1%	<1%
Optimal Diabetes Care, 2019	77%	8%	4%	1%	4%	1%	<1%	<1%

Note: Percentages do not sum to 100 percent. Patients self-reported their race and ethnicity, and some declined to provide this information. Some patients' race and ethnicity data were unknown or not reportable because it was not collected according to best practices. Patients who identified their ethnicity as Hispanic or Latino also self-identified with one or more races. Patients who reported more than one race were included in the Multiracial category.

Optimal Diabetes Care: Patient Population by Gender, 2018 and 2019



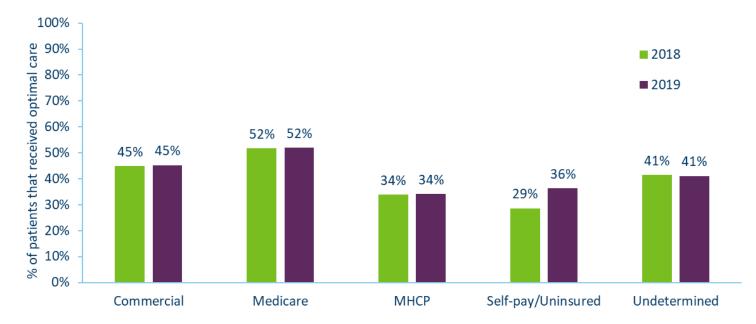
Table of Optimal Diabetes Care: Patient Population by Gender

Measure Population	Female	Male	Other Gender
Optimal Diabetes Care, 2018	46%	54%	<1%
Optimal Diabetes Care, 2019	46%	54%	<1%

Note: The Other Gender category may represent patients who do not identify with female or male genders, or patients whose gender has not been captured in the data. Other Gender patients were not included in bar charts due to very small numbers.

Optimal Care Rates by Health Insurance Type

- Patients with Medicare had the highest optimal care rate at 52 percent, followed by patients with commercial insurance.
- Rates for each group were stable between 2018 and 2019 except for the smallest payer group, self-pay/uninsured patients, whose
 optimal care rate increased from 29 percent to 36 percent.



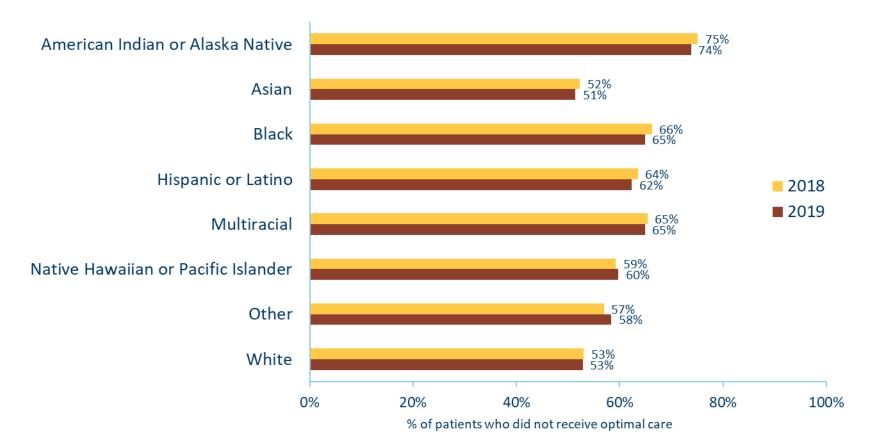
Optimal Diabetes Care: Optimal Care Rate by Health Insurance Type

Table of Optimal Diabetes Care: Optimal Care Rate by Health Insurance Type

Performance Year	Commercial	Medicare	МНСР	Self-Pay/Uninsured	Undetermined
2018	45%	52%	34%	29%	41%
2019	45%	52%	34%	36%	41%

Non-Optimal Care Rates by Race/Ethnicity

- Optimal care rates for all race and ethnic groups fall short of 100 percent. This chart displays the proportion of patients in each group that did not receive optimal care.
- Across all race and ethnic groups, less than half of patients received optimal diabetes care in 2018 or 2019.
- Three-quarters of American Indian or Alaska Native patients with diabetes had non-optimal care in 2018 and 2019.



Optimal Diabetes Care: Non-Optimal Care Rate by Race/Ethnicity

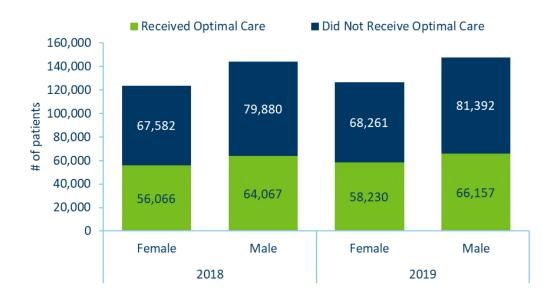
Year	Rates	American Indian or Alaska Native	Asian		Hispanic or Latino Ethnicity		Native Hawaiian or Pacific Islander	Other	White
2018	Optimal Care Rate	25%	48%	34%	36%	35%	41%	43%	47%
2018	Non-Optimal Care Rate	75%	52%	66%	64%	65%	59%	57%	53%
2019	Optimal Care Rate	26%	49%	35%	38%	35%	40%	42%	47%
2019	Non-Optimal Care Rate	74%	51%	65%	62%	65%	60%	58%	53%

Table of Optimal Diabetes Care: Rates by Race/Ethnicity

Note: Race/ethnic groups are displayed in alphabetical order. Percentages do not sum to 100 percent. Patients self-reported their race and ethnicity, and some declined to provide this information. Some patients' race and ethnicity data were unknown or not reportable because it was not collected according to best practices. Patients who identified their ethnicity as Hispanic or Latino also self-identified with one or more races. Patients who reported more than one race were included in the Multiracial category.

Optimal Care by Gender

- Male and female patients had the same average optimal care rate of 45 percent in 2018.
- In 2019, the female optimal care rate was 46 percent and the male optimal care rate remained at 45 percent.



Optimal Diabetes Care: Patients by Gender

Table of Optimal Diabetes Care: Patients by Gender

	Received Optimal	•		/		Optimal Care Rate, 2019
Female	56,066	67,582	58,230	68,261	45%	46%
Male	64,067	79,880	66,157	81,392	45%	45%

Note: The Other Gender category may represent patients who do not identify with female or male genders, or patients whose gender has not been captured in the data. Other Gender patients were not included in bar charts or tables due to very small numbers: in 2018 there was one Other Gender patient; in 2019 there were eight Other Gender patients.

Optimal Vascular Care

The percentage of ischemic vascular disease patients, ages 18-75, who met ALL of the following four goals:

- 1) Blood pressure control
- 2) Statin use, if needed
- 3) Daily aspirin use, if needed
- 4) No tobacco use

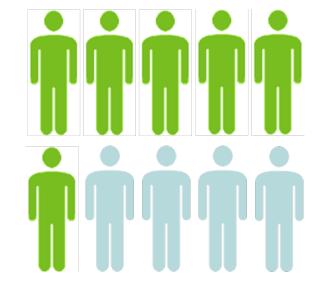
Measure steward: MN Community Measurement

National Quality Forum #0076

Statewide Rate

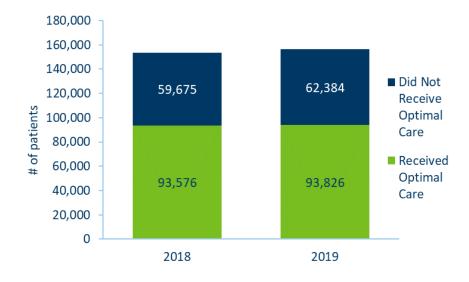
- Six of every 10 eligible patients received optimal vascular care. This number was the same in 2018 and 2019.
- The statewide optimal care rate was 61 percent in 2018 and 60 percent in 2019.

Optimal Vascular Care: Statewide Rate in 2018 and 2019



Patient Counts

- From 2018 to 2019, the total number of vascular patients increased by 2,959.
- The optimal care rate was 61 percent in 2018 and 60 percent in 2019.



Optimal Vascular Care: Patient Counts

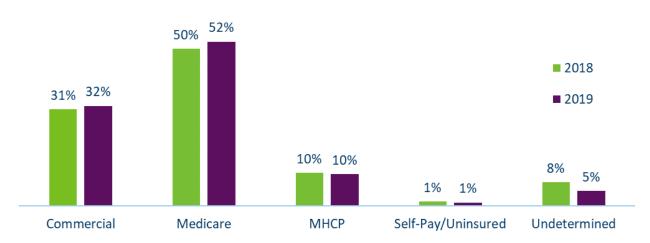
Table of Optimal Vascular Care: Patient Counts

Outcome	2018	2019
Did Not Receive Optimal Care	59,675	62,384
Received Optimal Care	93,576	93,826
Optimal Care Rate	61%	60%

Note: There were 586 reporting clinics in 2018 and 574 in 2019.

Patient Population by Health Insurance Type, Race/Ethnicity, and Gender

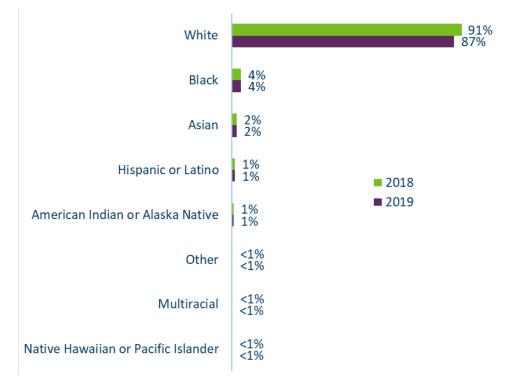
- Among vascular patients, roughly half had Medicare and just under one-third had commercial insurance.
- About nine out of 10 patients identified as White.
- Two-thirds of patients were male.
- These proportions were the same in 2018 and 2019.



Optimal Vascular Care: Patient Population by Health Insurance Type

Table of Optimal Vascular Care: Patient Population by Health Insurance Type

Year	Commercial	Medicare	МНСР	Self-Pay/Uninsured	Undetermined
2018	31%	50%	10%	1%	8%
2019	32%	52%	10%	1%	5%



Optimal Vascular Care: Patient Population by Race/Ethnicity

Table of Optimal Vascular Care: Patient Population by Race/Ethnicity

Measure Population	White	Black			American Indian or Alaska Native			Native Hawaiian or Pacific Islander
Optimal Vascular Care, 2018	91%	4%	2%	1%	1%	<1%	<1%	<1%
Optimal Vascular Care, 2019	87%	4%	2%	1%	1%	<1%	<1%	<1%

Note: Percentages do not sum to 100 percent. Patients self-reported their race and ethnicity, and some declined to provide this information. Some patients' race and ethnicity data were unknown or not reportable because it was not collected according to best practices. Patients who identified their ethnicity as Hispanic or Latino also self-identified with one or more races. Patients who reported more than one race were included in the Multiracial category.

Optimal Vascular Care: Patient Population by Gender



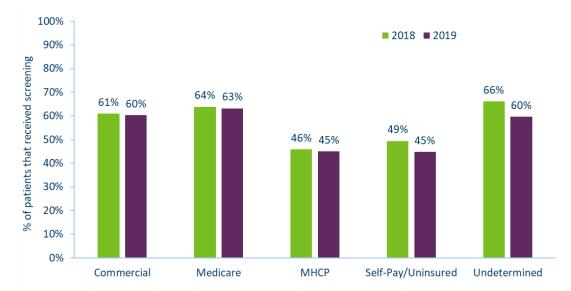
Table of Optimal Vascular Care: Patient Population by Gender

Measure Population	Female	Male	Other Gender
Optimal Vascular Care, 2018	34%	66%	<1%
Optimal Vascular Care, 2019	34%	66%	<1%

Note: The Other Gender category may represent patients who do not identify with female or male genders, or patients whose gender has not been captured in the data. Other Gender patients were not included in bar charts due to very small numbers.

Optimal Care by Health Insurance Type

- This chart shows how far optimal care rates are falling short of 100 percent, stratified by patient race and ethnicity.
- Patients with MHCP coverage and self-pay/uninsured patients had the lowest optimal care rates in 2018 and 2019. Medicare patients
 had the highest optimal care rates in both years, aside from patients with undetermined payer types in 2018.
- Rates for all groups decreased slightly between 2018 and 2019.



Optimal Vascular Care: Optimal Care Rates by Health Insurance Type

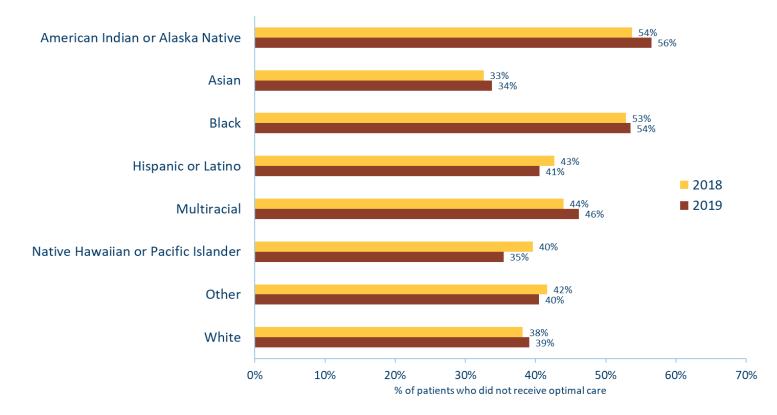
Table of Optimal Vascular Care: Stratified by Health Insurance Type

Year	ar Commercial Medicare		МНСР	AHCP Self-Pay/Uninsured		
2018	61%	64%	46%	49%	66%	
2019	60%	63%	45%	45%	60%	

Note: MHCP is Minnesota Health Care Programs, which includes Medical Assistance, MinnesotaCare, and the Minnesota Family Planning Program. Source: MDH Health Economics Program analysis of Quality Reporting System data.

Non-Optimal Care Rates by Race/Ethnicity

- Over half of American Indian or Alaska Native patients and Black patients had non-optimal vascular care in 2018 and 2019.
- Asian and White patients had the highest rates of optimal vascular care but more than a third of patients in these groups still had nonoptimal vascular care in 2018 and 2019.



Optimal Vascular Care: Non-Optimal Care Rates by Race/Ethnicity

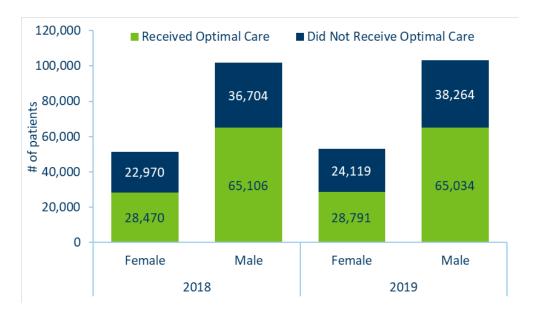
Year	Rates	American Indian or Alaska Native	Asian	Black	Hispanic or Latino Ethnicity		Native Hawaiian or Pacific Islander	Other	White
2018	Optimal Care Rate	46%	67%	47%	57%	56%	60%	58%	62%
2018	Non-Optimal Care Rate	54%	33%	53%	43%	44%	40%	42%	38%
2019	Optimal Care Rate	44%	66%	46%	59%	54%	65%	60%	61%
2019	Non-Optimal Care Rate	56%	34%	54%	41%	46%	35%	40%	39%

Table of Optimal Vascular Care: Rates by Race/Ethnicity

Note: Race/ethnic groups are displayed in alphabetical order. Percentages do not sum to 100 percent. Patients self-reported their race and ethnicity, and some declined to provide this information. Some patients' race and ethnicity data were unknown or not reportable because it was not collected according to best practices. Patients who identified their ethnicity as Hispanic or Latino also self-identified with one or more races. Patients who reported more than one race were included in the Multiracial category.

Optimal Care by Gender

- Male patients had a higher optimal care rate than women in 2018 (64 percent among men) and 2019 (63 percent among men).
- The optimal care rate for female patients was 55 percent in 2018 and 54 percent in 2019.



Optimal Vascular Care: Patients by Gender

Table of Optimal Vascular Care: Patients by Gender

Gender	Received Optimal Care, 2018			Did Not Receive Optimal Care, 2019		Optimal Care Rate, 2019
Female	28,470	22,970	28,791	24,119	55%	54%
Male	65,106	36,704	65,034	38,264	64%	63%

Note: The Other Gender category may represent patients who do not identify with female or male genders, or patients whose gender has not been captured in the data. Other Gender patients were not included in bar charts or tables due to very small numbers: in 2018 there was one Other Gender patient; in 2019 there were two Other Gender patients.

Resources

Additional Information from the Health Economics Program

- Health Economics Program: <u>health.state.mn.us/data/economics</u>
- Health Care Markets Chartbook: <u>health.state.mn.us/data/economics/chartbook</u>
- Statewide Quality Reporting and Measurement System: <u>health.state.mn.us/data/hcquality</u>

Quality Measurement Resources

- MN Community Measurement: <u>mncm.org</u>
- MNHealthScores: <u>mnhealthscores.org</u>
- Medicare Provider Compare: <u>medicare.gov/care-compare</u>
- National Quality Forum: <u>qualityforum.org</u>
- Agency for Healthcare Research and Quality: <u>ahrq.gov</u>

Minnesota Department of Health Health Economics Program 85 East 7th Place PO Box 64882 St. Paul, MN 55164-0882 651-201-3550 <u>health.sqrms@state.mn.us</u> www.health.state.mn.us/data/economics

4/6/22

To obtain this information in a different format, call: 651-201-4520.